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(*Recognosce notum, ignotum inspice*)

TRANSACTIONS

Edited by

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THE STROUD FORAY

May 11th–15th, 1934

By E. M. WAKEFIELD

The Spring Foray for 1934 was held during the week-end May 11th–15th, with headquarters at the Amberley Ridge Hotel, near Stroud.

The first day's excursion was to Cranham Woods, between Painswick and Cheltenham. A start was made from the hotel at 10.15 a.m., and the party travelled by bus as far as the King William Hotel, near Cranham Corner. Some little time was spent in the woods behind the hotel in a search for *Pyrola*, which had been found there during the Painswick Foray in 1920, attacked by its rust, *Chrysomyxa Pyrolae*. Unfortunately, however, the plant appears to have now become almost extinct in that locality, owing to the use of the wood by picnic parties.

A move was then made towards Cranham Corner, and the woods between there and Cranham Village were explored. Owing to the dry winter and spring the larger fungi were very scarce. The most noteworthy find was *Sarcosphaera coronaria*, which occurred in abundance in certain spots, growing amongst moss on the ground and at the foot of banks beside the paths. A few rusts and other microfungi were secured, but nothing of any special interest.

On the following day, Sunday, Woodchester Park was the objective. Sufficient private cars were available, and by a steep and narrow rutty lane the party arrived in procession at the gates of the Park, and were admitted by the lodge-keeper. The Park was found to be a place to rejoice a botanist's heart, and many remarked how good it would be for fungi in autumn. At this time, like the rest of the country, it had suffered from the drought, but at the same time the variety of vegetation provided many more fungi than had been found on the previous day. Some cherries were found badly attacked by leaf-curl (*Taphrina minor*). Among other microfungi collected were *Entyloma Ranunculi*, abundant on *Ranunculus Ficaria*, and *Endophyllum Euphorbiae-sylvaticae* on *Euphorbia amygdaloides*. Basidiomycetes were also more in evidence, owing partly to moisture provided near a chain of lakes, and partly to the presence of plenty of rotting wood. *Eichleriella spinulosa*, found during the Painswick Foray, was again collected, while of the larger fungi *Tricholoma gambosum*, *Coprinus ephemerus*, and *Polyporus dryadeus* may be noted.

Monday was devoted to the exploration of Cirencester Park. Here again, however, fungi were very few. A good group of *Morchella rotunda* was found, fine large specimens, some of which were taken

for a culinary test. There was little of any special interest, but *Peniophora longispora* and *Aleuria umbrina* were among the less common species recorded.

During the week-end a meeting was held to consider proposals for the 1935 Spring Foray. After considerable discussion Derbyshire (Buxton or Matlock) was proposed, and Tunbridge Wells was suggested as an alternative should it not be possible to arrange for a Derbyshire meeting. The final decision was left with the Council.

Miss L. Hunter, of Toronto, gave an informal account of her work on the genus *Milesia*. Mr Petch gave an interesting talk on some entomogenous fungi found in caves, and Dr Alex. Smith showed specimens of the very rare *Puccinia Bulbocastani* on *Carum Bulbocastanum*. At the close of the meeting votes of thanks were accorded, and special thanks were expressed to Mr E. M. Day, who had made all arrangements for the very pleasant meeting. Members regretted that owing to illness Mr Day was unable to join in the excursions.

The Secretary is indebted especially to Mr Ramsbottom, Mr Pearson, Dr Alex. Smith, Mr T. Petch, and Mr E. W. Mason for assistance in compiling the subjoined list.

Complete List of Species found during the Foray

P. = Cranham Woods, near Painswick; *C.* = Cirencester Park; *W.* = Woodchester Park; *A.* = Amberley Hotel grounds.

HYMENOMYCETES

Armillaria mellea (Vahl) Fr., rhizomorphs, *C.*
Tricholoma gambosum Fr., *W.*
Mycena amicta Fr., *P.*
Marasmius globularis Fr., *C.*, dryophilus (Bull.) Karst., *C.*
Panus stipticus (Bull.) Fr., *W.*
Schizophyllum commune Fr., *W.*
Nolanea pascua (Pers.) Fr., *W.*
Pholiota praecox (Pers.) Fr., *W.*, *C.*, mutabilis (Schaeff.) Fr., *W.*
Hebeloma crustuliniforme (Bull.) Fr., *C.*
Galera tenera (Schaeff.) Fr., *C.*, *P.*
Naucoria melinoides Fr., *W.*
Tubaria furfuracea (Pers.) W. G. Sm., *P.*
Crepidotus mollis (Schaeff.) Fr., *W.*
Psalliota campestris (Linn.) Fr., *C.*
Hypholoma fasciculare (Huds.) Fr., *P.*, *W.*, *C.*, velutinum (Pers.) Fr., *P.*, appendiculatum (Bull.) Fr., *P.*, *W.*
Psilocybe foenisecii (Pers.) Fr., *W.*
Psathyrella disseminata (Pers.) Fr., *P.*
Panaeolus campanulatus (Linn.) Fr., *W.*
Coprinus micaceus (Bull.) Fr., *C.*, *P.*, velox Godey, *C.*, ephemerus (Bull.) Fr., *P.*, plicatilis (Curt.) Fr., *P.*, *W.*
Polyporus squamosus (Huds.) Fr., *W.*, *C.*, sulphureus (Bull.) Fr., *C.*, dryadeus (Pers.) Fr., *W.*, radiatus (Sow.) Fr., *W.*, fumosus (Pers.) Fr., *P.*, adustus (Willd.) Fr., *W.*, *C.*, caesius (Schrad.) Fr., *W.*, *P.*
Fomes ulmarius (Sow.) Fr., *W.*, *C.*, ferruginosus (Schrad.) Mass., *W.*

Ganoderma applanatum (Fr.) Pat., *W.*
Polystictus versicolor (Linn.) Fr., *P.*, *W.*, *C.*, abietinus (Dicks.) Fr., *W.*
Irpex obliquus (Schrad.) Fr., *W.*
Lenzites betulina (Linn.) Fr., *W.*
Trametes gibbosa (Pers.) Fr., *W.*, mollis (Sommerf.) Fr., *W.*
Daedalea quercina (Linn.) Fr., *W.*
Stereum spadiceum Fr., *W.*, rugosum (Pers.) Fr., *W.*, hirsutum (Willd.) Fr., *W.*, purpureum Pers., *W.*, *C.*
Corticium laeve Pers., *W.*, *C.*, lividum (Pers.) Fr., *C.*, porosum B. & C., *C.*, praetermissum (Karst.) Bres., *W.*, lactescens Berk., *W.*
Peniophora longispora (Pat.) v. H. & L., *C.*, cremea Bres., *W.*, *C.*, velutina (DC.) Cooke, *W.*, hydnoides Cooke & Mass., *W.*, *C.*, cinerea (Fr.) Cooke, *W.*, *C.*
Auricularia auricula-Judae (Linn.) Schroet., *W.*
Tremella mesenterica (Retz.) Fr., *W.*
Exidea nucleata (Schw.) Rea, *P.*, Thuretiana (Lév.) Fr., *C.*
Eichleriella spinulosa (B. & C.) Burt., *W.*

GASTEROMYCETES

Lycoperdon perlatum Pers., *C.*

UREDINALES

Uromyces Ficariae (Schum.) Lév., *W.*, Acetosae Schroet., *W.*, Alchemillae (Pers.) Lév., *C.*, Scillarum (Grev.) Wint., *P.*, *C.*, Dactylidis Otth, aecidium on *Ranunculus*, *P.*
Puccinia Anemones Pers., *P.*, *C.*, Violae (Schum.) DC., *P.*, pulverulenta Grev., *W.*, Saniculae Grev., *P.*, Celakovskiana Bubák, *W.*, obtegens (Link) Tul., *W.*, Hieracii (Schum.) Mart., *P.*, Taraxaci Plowr., *P.*, Buxi DC., *C.*
Kuehneola albida (Kuehn.) Magn., *W.*, *C.*
Ochropsora Sorbi (Oud.) Diet., aecidium on *Anemone*, *P.*
Endophyllum Euphorbiae-sylvaticae Wint., on *Euphorbia amygdaloides*, *P.*, *W.*

USTILAGINALES

Entyloma Ranunculi (Bon.) Schroet., on *Ranunculus Ficaria*, *W.*
Urocystis Anemones (Pers.) Schroet., *P.*, *C.*

PYRENOMYCETES

Podosphaera Oxyacanthae (DC.) de Bary, *P.*
Sphaerotheca pannosa (Wallr.) Lév., *P.*
Microsphaera Berberidis (DC.) Lév., on *Mahonia Aquifolium*, *A.*
Erysiphe graminis DC., *W.*
Nectria Peziza (Tode) Fr., *C.*, sanguinea (Bolt.) Fr., *W.*
Hypomyces rosellus (A. & S.) Tul., *W.*, aurantius (Pers.) Tul., *C.*
Leptospora ovina (Pers.) Fuck., *W.*
Stigmatea Robertiana Fr., *P.*
Eutypa Acharii Tul., on *Acer*, *W.*, lata (Pers.) Tul., *C.*, spinosa (Pers.) Tul., *C.*
Botryosphaeria Dothidea (Moug.) Ces. & de Not., on *Rosa arvensis*, *P.*
Diatrypella quercina (Pers.) Nits., *W.*
Diatrype Stigma (Hoffm.) Fr., on *Fagus*, *W.*
Ustulina vulgaris Tul., *P.*, *W.*, *C.*
Hypoxylon coccineum Bull., *W.*, fuscum (Pers.) Fr., on *Corylus*, *W.*, *C.*
Daldinia concentrica (Bolt.) Ces. & de Not., *W.*
Xylaria Hypoxylon (Linn.) Grev., *C.*

HYSTERIALES

Dichaena faginea Fr., *C.*

DISCOMYCETES

Morchella rotunda (Pers.) Boud., *C.*
Aleuria umbrina Boud., *C.*
Sarcosphaera coronaria (Jacq.) Boud., *P.*
Cheilymenia coprinaria (Cooke) Boud., *P.*
Ascobolus stercorarius (Bull.) Schroet., *P.*
Dasyobolus immersus (Pers.) Sacc., *P.*
Pyronema omphalodes (Bull.) Fuck., *C.*
Taphrina minor Sadeb., on *Cerasus*, *W.*
Calycella citrina (Hedw.) Quél., *W.*
Bulgaria inquinans (Pers.) Fr., *C.*
Dasyscypha virginea (Pers.) Fr., *P.*
Rhytisma acerinum (Pers.) Fr., *P.*

PHYCOMYCETES

Cystopus candidus (Pers.) de Bary, on *Arabis*, *A.*
Plasmopara pygmaea Schroet., on *Anemone*, *W.*, *C.*
Peronospora alsinearum Casp., *W.*, calotheca de Bary, *C.*
Empusa Muscae Cohn, *A.*

DEUTEROMYCETES

Stagonospora Curtisii (Berk.) Sacc., *A.*
Septoria Rubi West., *P.*
Ceuthospora phacidioides Grev., on *Ilex*, *C.*
Gloeosporium Helicis (Desm.) Oud., *P.*
Leptostroma filicinum Fr., *W.*
Gliocladium penicillioides Corda, on *Didymium squamulosum*, *W.*
Botrytis cinerea Pers., *W.*
Cylindrodendrum album Bon., on Alder catkins, *W.*
Ovularia obliqua (Cooke) Oud., *W.*
Beauveria Bassiana (Bals.) Vuill., on weevils, *P.*
Ramularia acris Lindr., on *Ranunculus repens*, *W.*, Calthae Lindr., *W.*
Bispora monilioides Corda, *P.*, *C.*
Tilachlidium tomentosum (Schrad.) Lindau, on *Trichia varia*, *C.*
Isaria farinosa (Holmsk.) Fr., on pupae, *P.*

MYCETOZOA

By T. Petch

Ceratiomyxa fruticulosa Macbr., *W.*
Physarum nutans Pers., *C.*, viride Pers., *C.*
Fuligo septica Gmel., *W.*
Didymium squamulosum Fr., *W.*
Stemonitis fusca Roth, *W.*
Comatricha typhoides Rost., *W.*, *C.*
Lycogala epidendrum Fr., *P.*, *W.*, *C.*
Trichia affinis de Bary, *C.*, persimilis Karst., *C.*, varia Pers., *C.*, decipiens Macbr., *W.*, *C.*
Arcyria denudata Wettst., *P.*, *W.*, *C.*, incarnata Pers., *W.*

THE NORWICH FORAY

October 1st–6th, 1934

By E. M. WAKEFIELD

The thirty-eighth Autumn Foray and Annual General Meeting was held at Norwich during the week October 1st–6th, at the invitation of the Norfolk and Norwich Naturalists' Society. By kind permission of the Castle Museum Committee, headquarters were at the Castle Museum, where a room for meetings was available, and space for the exhibition of specimens. Here a large number of members and visitors assembled on the Monday evening, and were met by members of the Norfolk and Norwich Naturalists' Society. Miss Geldart, Vice-President of the Norfolk and Norwich Naturalists, made a short speech of welcome, to which Mr Ramsbottom replied on behalf of the British Mycological Society.

On the morning of October 2nd an early start was made by special coach in the direction of Cromer. Stopping at Northrepps Hall, the party were welcomed by Mrs and Miss Gurney, and after a glance through the gardens proceeded to work through Overstrand Woods, mixed woods with a considerable number of conifers (spruce and silver fir). *Hymenochaete Mougeotii* was soon discovered. It was first found in these woods some years ago. One of the most striking finds was a fallen trunk of silver fir which was completely covered with *Polyporus benzoinus*. Seen thus in a fresh and actively growing state the fungus is very different in appearance from the dark-coloured, shrivelled, dried specimens. In the growing state it has a conspicuous, swollen, white margin, immediately behind which there is a bright brown zone. Some of the firs in these woods were obviously failing, and as both *Armillaria mellea* and *Fomes annosus* were commonly present it is probable that these two fungi were doing considerable damage. After traversing these woods the party was picked up again by the coach, and taken on to woods at West Runton, where *Hymenochaete Mougeotii* was again turned up. Rain began soon after lunch and became very heavy towards tea time, so that after tea the party was glad to get into the coach and return to Norwich.

Wednesday's excursion was to Westwick and North Walsham, starting at 11.0 a.m. Westwick proved very rich in fungi, and most members felt they could have profitably spent the day in the area where they were first put down. The long subsequent walk to North Walsham yielded very little, but tea at the end, kindly provided by Mr and Mrs J. B. Brookes, was most welcome. A brief roadside survey before actually entering the woods at Westwick yielded

numerous Agarics and Boleti, including *Boletus viscidus*, *B. elegans*, *Paxillus atrotomentosus*, and other conifer-loving species. In the woods *Sparassis crispa* was found, and other noteworthy records were *Russula claroflava*, *R. sphagnophila*, *R. paludosa* Britz., and *Puccinia Hydrocotyles*. The woods at North Walsham yielded *Cordyceps capitata* and *C. ophioglossoides*.

Thursday was spent chiefly in woods and heathy ground at Stratton Strawless. Almost at once a quantity of the curious, sterile mycelium known as *Anthina flammea* was found amongst dead leaves. By the roadside *Pulvinula constellatio* was secured, and in the woods the most noteworthy finds were *Sparassis crispa*, *Cyathus striatus*, *Helvella lacunosa*, *Russula sphagnophila*, *Cortinarius phoeniceus*, *Volvaria bombycina*, *Leptonia sarcita*, and *Polyporus brumalis*. After tea at Cawston a short visit was paid to Buxton Heath, the only known locality for *Bovistella paludosa*. One old specimen was secured, but the visit was evidently too late for getting this fungus in good condition. On the Heath were found also *Entoloma Bloxamii*, and *Leptonia formosa*.

On Friday, October 5th, the party spent the morning in Sprowston and Plumstead Woods, and the afternoon at Framingham Chase and Framingham Manor Woods. At Framingham *Puccinia Antirrhini* was noticed in great quantity in a lodge garden, and at the same place was found a rather meagre specimen of *Cronartium asclepiadeum* Fr., on *Tropaeolum majus*. A small party made a special expedition to Wheatfen Broad, Surlingham, and added a number of records to the list.

The Annual General Meeting was held on the Tuesday evening, when the Officers and Council for the ensuing year were elected. Dr Malcolm Wilson was unanimously elected as President for 1935. Dr B. Barnes and Mr F. G. Gould are Vice-Presidents. The Treasurer, Secretaries and Editors remain as before. New members of Council, to replace those retiring under the Rules, are Mr C. G. C. Chesters, Mr H. J. Howard, and Mr H. H. Knight.

The list of members of the Plant Pathology Committee for 1935, elected by the Committee, was read and confirmed. New members are Mr Cartwright, Mr Ogilvie, and Miss K. Sampson.

A very warm invitation had been received from representative Irish botanists to hold the 1935 Autumn Foray at Killarney. It was felt, however, that southern England was due for a visit, and, moreover, the visit to Belfast had been comparatively recent. For this reason Dr O'Connor, who had transmitted the invitation, was asked if it might be held over for a future date. For 1935 it was decided to try to arrange a Foray in Devon.

The Presidential Address, on "Induced Variation", was delivered by Dr Barnes on Wednesday evening, October 3rd. On Thursday evening Mr H. Ramage (visitor) gave a talk on the Mineral Content of

Fungi, illustrated by lantern slides showing spectra. Miss Cayley gave a preliminary account of some work she had been doing with mushrooms, especially the species *Psalliota campestris*, *hortensis*, and *arvensis*.

On Friday evening Mr Rea contributed one of his informal and instructive talks on the more interesting species of fungi which had been found during the week.

The meeting ended with hearty votes of thanks to all the landowners concerned, to the Norfolk and Norwich Naturalists, and to the Committee and Staff of the Castle Museum, and particularly to Mr G. J. Cooke, who had made all the local arrangements and who with Mrs Cooke had contributed so much enthusiasm and energy to the organisation of a most enjoyable foray.

For assistance in compiling the attached list of species the Secretary is indebted to all members present, but especially to Mr Rea, Mr Ramsbottom, Mr Pearson, Mr Petch, Mr E. W. Mason, and Dr Alex. Smith.

Complete List of Species found during the Foray

N. = Northrepps Hall and Overstrand Woods; *R.* = West Runton; *W.* = Westwick and North Walsham; *S.* = Stratton Strawless; *B.* = Buxton Heath; *P.* = Sprowston and Plumstead Woods; *F.* = Framingham Chase; *C.* = Cawston; *G.* = Wheatfen Broad, Surlingham.

HYMENOMYCETES

Amanita verna (Lam.) Fr., *N.*, *R.*, *W.*, phalloides (Vaill.) Fr., *W.*, *P.*, *S.*, porphyria (A. & S.) Fr., *S.*, mappa (Batsch) Fr., *R.*, *W.*, *S.*, *P.*, and var. alba (Gill.) Rea, *S.*, muscaria (Linn.) Fr., *R.*, *W.*, *S.*, and var. formosa Fr., *S.*, spissa Fr., *W.*, *S.*, rubescens (Pers.) Fr., *N.*, *R.*, *W.*, *S.*, *P.*, *G.*

Amanitopsis fulva (Schaeff.) W. G. Sm., *W.*, *P.*, *S.*, *G.*

Lepiota procera (Scop.) Fr., *R.*, *S.*, rhacodes (Vitt.) Fr., *S.*, echinella Quél. & Bern., *P.*, *G.*, felina (Pers.) Fr., *N.*, *R.*, cristata (A. & S.) Fr., *W.*, *S.*, granulosa (Batsch) Fr., *N.*, *W.*, amianthina (Scop.) Fr., *W.*

Armillaria mellea (Vahl) Fr., *N.*, *W.*, *P.*, *S.*, *G.*, mucida (Schrad.) Fr., on beech and oak, *S.*

Tricholoma resplendens Fr., *F.*, fulvum (DC.) Fr., *S.*, albobrunneum (Pers.) Fr., *W.*, *S.*, rutilans (Schaeff.) Fr., *N.*, *R.*, *W.*, *P.*, acerbum (Bull.) Fr., *W.*, nudum (Bull.) Fr., *N.*, cinerascens (Bull. non Fr.) Quél., *S.*, *P.*, grammopodium (Bull.) Fr., *S.*, melaleucum (Pers.) Fr., *W.*, *S.*, sordidum (Schum.) Fr., *W.*

Clitocybe nebularis (Batsch) Fr., *S.*, clavipes (Pers.) Fr., *W.*, *S.*, aurantiaca (Wulf.) Studer, *N.*, *R.*, *W.*, *F.*, *G.*, and var. albida (Gill.) Rea, *W.*, *B.*, odora (Bull.) Fr., *W.*, rivulosa (Pers.) Fr., *W.*, candicans (Pers.) Fr., *R.*, infundibuliformis (Schaeff.) Fr., *N.*, *R.*, *W.*, *G.*, inversa (Scop.) Fr., *P.*, flaccida (Sow.) Fr., *W.*, *G.*, suaveolens (Schum.) Fr., *N.*, *W.*, *F.*, *P.*, ditopus Fr., *W.*, vibecina Fr., *N.*, *S.*

Laccaria laccata (Scop.) B. & Br., *N.*, *W.*, *S.*, *P.*, *G.*, and var. amethystina (Vaill.) B. & Br., *N.*, *S.*, *F.*

Collybia radicata (Relh.) Berk., *W.*, *S.*, *F.*, *P.*, platyphylla (Pers.) Fr., *R.*, *N.*, *W.*, maculata (A. & S.) Fr., *N.*, *R.*, *W.*, *P.*, *G.*, distorta Fr., *W.*, butyracea (Bull.) Fr., *W.*, cirrhata (Schum.) Fr., *N.*, *S.*, tuberosa (Bull.) Fr., *R.*, *W.*, *S.*, *F.*, atrata Fr., *S.*, protracta Fr., *N.*

Mycena pelianthina Fr., *N.*, rubro-marginata Fr., *R.*, *P.*, pura (Pers.) Fr., *N.*, *W.*, *S.*, *F.*, *G.*, lineata (Bull.) Fr., *S.*, galericulata (Scop.) Fr., *N.*, *R.*, *S.*, *P.*, *G.*, polygramma (Bull.) Fr., *S.*, alcalina Fr., *N.*, ammoniaca Fr., *N.*, *R.*, *W.*, vitilis Fr., *R.*, amicta Fr., *F.*, Iris Berk., *P.*, *F.*, sanguinolenta (A. & S.) Fr., *N.*, *R.*, *W.*, *S.*, *F.*, galopus (Pers.) Fr., *N.*, *W.*, *S.*, *P.*, and var. alba Fl. Dan., *R.*, and var. nigra Fl. Dan., *W.*, epipterygia (Scop.) Fr., *S.*, vulgaris (Pers.) Fr., *W.*, stylobates (Pers.) Fr., *N.*, *W.*, *F.*

Omphalia fibula (Bull.) Fr., *N.*, *W.*, *P.*, umbellifera (Linn.) Fr., *R.*

Pleurotus corticatus Fr., *W.*, acerosus Fr., *C.*, applicatus (Batsch) Quél., *S.*

Hygrophorus conicus (Scop.) Fr., *S.*, nigrescens Quél., *P.*, chlorophanus Fr., *S.*

Lactarius torminosus (Schaeff.) Fr., *W.*, *S.*, turpis (Weinm.) Fr., *W.*, *S.*, *G.*, *F.*, *P.*, blennius Fr., *W.*, *S.*, chrysorheus Fr., *W.*, vellereus Fr., *P.*, deliciosus (Linn.) Fr., *W.*, pallidus (Pers.) Fr., *R.*, *W.*, quietus Fr., *W.*, *S.*, *F.*, *P.*, *G.*, theiogalus (Fr.) Plowr., *W.*, *P.*, vietus Fr., *W.*, *S.*, rufus (Scop.) Fr., *R.*, *W.*, *F.*, *P.*, glyciosmus Fr., *R.*, *W.*, *S.*, serifluus (DC.) Fr., *N.*, *S.*, *P.*, mitissimus Fr., *S.*, subdulcis (Pers.) Fr., *W.*, *S.*, tabidus Fr., *W.*

Russula chloroides (Krombh.) Bres., *N.*, *W.*, nigricans (Bull.) Fr., *N.*, *R.*, *G.*, adusta (Pers.) Fr., *R.*, *W.*, *S.*, *P.*, *G.*, azurea Bres., *R.*, cyanoxantha (Schaeff.) Fr., *N.*, *R.*, *W.*, *S.*, *G.*, furcata (Pers.) Fr., *W.*, heterophylla Fr., *W.*, *S.*, *P.*, *G.*, pectinata (Bull.) Fr., *N.*, ochroleuca (Pers.) Fr., *N.*, *R.*, *W.*, *S.*, *P.*, *G.*, claroflava Grove, *W.*, fellea Fr., *N.*, *R.*, *W.*, *S.*, *P.*, drimeia Cooke, *W.*, *P.*, and var. Queletii (Fr.) Bat., *N.*, fragilis (Pers.) Fr., *W.*, *S.*, *P.*, emetica (Schaeff.) Fr., *R.*, *W.*, *S.*, atropurpurea (Krombh.) Maire, *N.*, *S.*, *P.*, *G.*, xerampelina (Schaeff.) Fr., *S.*, grisea (Pers.) Bres., *R.*, puellaris Fr., *W.*, vesca Fr., *W.*, *S.*, caerulea Cooke, *W.*, sphagnophila Kauffm., *S.*, *W.*, paludosa Britz., *W.*

Cantharellus cibarius Fr., *R.*, *W.*, *P.*, *S.*, infundibuliformis (Scop.) Fr., *W.*

Marasmius peronatus (Bolt.) Fr., *N.*, *W.*, *S.*, *G.*, oreades (Bolt.) Fr., *R.*, conigenus (Pers.) Karst., *R.*, *W.*, *G.*, erythropus (Pers.) Fr., *W.*, *S.*, *P.*, hariolorum (DC.) Quél., *N.*, *S.*, *P.*, dryophilus (Bull.) Karst., *N.*, *F.*

Androsaceus androsaceus (Linn.) Pat., *W.*, *S.*, epiphyllus (Fr.) Pat., *S.*

Panus torulosus (Pers.) Fr., *W.*, *S.*

Volvaria bombycina (Schaeff.) Fr., *S.*

Pluteus cervinus (Schaeff.) Fr., *N.*, *P.*, *S.*, salicinus (Pers.) Fr., *W.*, pellitus (Pers.) Fr., *P.*

Entoloma Bloxamii Berk., *B.*, sericeum (Bull.) Fr., *S.*, *B.*

Nolanea proletaria Fr., *S.*, cetrata (Fr.) Schroet., *R.*, *S.*

Leptonia formosa Fr., *B.*, sarcita (Fr.) Quél., *S.*

Clitopilus prunulus (Scop.) Fr., *W.*, *S.*, *P.*

Claudopus variabilis (Pers.) W. G. Sm., *S.*, *G.*

Paxillus involutus (Batsch) Fr., *N.*, *R.*, *F.*, *W.*, *S.*, *G.*, atrotomentosus (Batsch) Fr., *W.*, giganteus (Sow.) Fr., *F.*

Pholiota erebia Fr., *N.*, *W.*, togularis (Bull.) Fr., *N.*, *R.*, praecox (Pers.) Fr., *S.*, radicosa (Bull.) Fr., *G.*, squarrosa (Mull.) Fr., *P.*, spectabilis Fr., *N.*, *F.*, *P.*, flammans Fr., *N.*, marginata (Batsch) Fr., *W.*

Hebeloma sinuosum Fr., *S.*, fastibile Fr., *R.*, mesophaeum Fr., *R.*, *W.*, *S.*, *P.*, *F.*, crustuliniforme (Bull.) Fr., *S.*, *P.*

Inocybe pyriodora (Pers.) Fr., *S.*, tomentosa (Jungh.) Quél., *W.*, corydalina Quél., *W.*, geophylla (Sow.) Fr., *R.*, *W.*, *P.*, *G.*, and var. lilacina Fr., *W.*, descissa Fr., *S.*, obscura (Pers.) Fr., *S.*, lacera Fr., *W.*, *S.*, cincinnata Fr., *W.*, fastigiata (Schaeff.) Fr., *R.*, *W.*

Astrosporina umbrina (Bres.) Rea, *W.*, petiginosa (Fr.) Rea, *W.*

Galera tenera (Schaeff.) Fr., *W.*, *S.*, spartea Fr., *S.*, rubiginosa (Pers.) Fr., *B.*, hypnorum (Schrank) Fr., *N.*, *S.*, *F.*, *P.*

Naucoria semiorbicularis (Bull.) Fr., *S.*, Myosotis Fr., *W.*, sobria Fr., *N.*, escharoides Fr., *W.*, badia Kühner (=N. umbrina R. Maire), *W.*

Tubaria furfuracea (Pers.) W. G. Sm., *W.*, *S.*, crobulus Fr., *S.*

Flammula gummosa (Lasch) Fr., *W.*, carbonaria Fr., *P.*, fusus (Batsch) Fr., *W.*, sapinea Fr., *N.*, *R.*, *W.*, *P.*, tricholoma (A. & S.) Fr., *F.*, *P.*, scamba Fr., *P.*

Cortinarius (Phlegmacium) varius (Schaeff.) Fr., *W.*, largus Fr., *S.*, multiformis Fr., *S.*, caerulescens Fr., *P.*, croceo-caeruleus (Pers.) Fr., *S.* (Myxacium) elatior Fr., *R.*, *W.*, *S.*, (Inoloma) pholideus Fr., *W.*, (Dermocybe) tabularis (Bull.) Fr., *R.*, *S.*, caninus Fr., *R.*, *S.*, anomalus Fr., *S.*, phoeniceus (Bull.) Maire, *S.*, semisanguineus (Brig.) Maire, *W.*, cinnamomeus (Linn.) Fr., *W.*, (Telamonia) bivelus Fr., *S.*, hinnuleus (Sow.) Fr., *S.*, *P.*, hemitrichus Fr., *W.*, rigidus (Scop.) Fr., *S.*, *P.*, (Hydrocybe) leucopus (Bull.) Fr., *P.*, obtusus Fr., *W.*, decipiens (Pers.) Fr., *W.*

Crepidotus mollis (Schaeff.) Fr., *W.*

Psalliota flavescens Gill., *S.*, campestris (Linn.) Fr., *N.*, sylvicola (Vitt.) Fr., *N.*, *S.*, haemorrhoidaria Kalchb., *F.*, arvensis (Schaeff.) Fr., var. purpurascens Cooke, *S.*, comtula Fr., *W.*

Stropharia aeruginosa (Curt.) Fr., *N.*, *W.*, *P.*, *G.*, squamosa (Pers.) Fr., *S.*, coronilla (Bull.) Fr., *C.*, semiglobata (Batsch) Fr., *P.*

Hypholoma sublateritium (Schaeff.) Fr., *R.*, capnoides Fr., *W.*, fasciculare (Huds.) Fr., *N.*, *R.*, *W.*, *F.*, *P.*, *G.*, epixanthum Fr., *S.*, dispersum Fr., *P.*, velutinum (Pers.) Fr., *W.*, appendiculatum (Bull.) Fr., *W.*, hydrophilum (Bull.) Fr., *N.*, *R.*, *W.*, *S.*

Psilocybe sarcocephala Fr., *R.*, ericaea (Pers.) Fr., *W.*, subericaea Fr., *W.*, uda (Pers.) Fr., *B.*, *P.*, semilanceata Fr., *N.*, *W.*, *P.*, foenisecii (Pers.) Fr., *W.*, *C.*

Psathyra gossypina (Bull.) Fr., *W.*, fibrillosa (Pers.) Fr., *W.*, *S.*

Psathyrella gracilis Fr., *W.*, crenata (Lasch) Fr., *S.*, atomata Fr., *C.*, *F.*

Panaeolus campanulatus (Linn.) Fr., *N.*, *W.*, *F.*

Coprinus comatus (Fl. Dan.) Fr., *F.*, atramentarius (Bull.) Fr., *N.*, micaceus (Bull.) Fr., *N.*, *S.*, lagopus Fr., *N.*, *W.*, *P.*, plicatilis (Curt.) Fr., *C.*, ephemerus (Bull.) Fr., *S.*

Gomphidius viscidus (Linn.) Fr., *N.*, *P.*

Boletus luteus (Linn.) Fr., *R.*, *W.*, elegans (Schum.) Fr., *W.*, *P.*, viscidus (Linn.) Fr., *W.*, granulatus (Linn.) Fr., *N.*, badius Fr., *W.*, *S.*, bovinus (Linn.) Fr., *W.*, piperatus (Bull.) Fr., *W.*, variegatus (Sw.) Fr., *R.*, *W.*, chrysenteron (Bull.) Fr., *N.*, *S.*, *F.*, *P.*, *G.*, subtomentosus (Linn.) Fr., *S.*, *N.*, *F.*, versicolor Rostk., *W.*, pruinatus Fr., *R.*, edulis (Bull.) Fr., *W.*, *P.*, pinicola (Vitt.) Rea, *P.*, reticulatus (Schaeff.) Boud., *W.*, *N.*, calopus Fr., *W.*, erythropus (Pers.) Quél., *N.*, *R.*, *P.*, *W.*, *S.*, duriusculus Schulz., *W.*, versipellis Fr., *R.*, *S.*, *G.*, scaber (Bull.) Fr., *W.*, *S.*, *G.*

Polyporus perennis (Linn.) Fr., *W.*, *P.*, *G.*, brumalis (Pers.) Fr., *S.*, squamosus (Huds.) Fr., *N.*, Schweinitzii Fr., *R.*, *W.*, giganteus (Pers.) Fr., *S.*, *F.*, betulinus (Bull.) Fr., *R.*, *W.*, *P.*, benzoinus (Wahlenb.) Fr., *N.*, adustus (Willd.) Fr., *R.*, *W.*, *S.*, lacteus Fr., *R.*, fragilis Fr., *R.*, *W.*, caesius (Schrad.) Fr., *R.*, stipticus (Pers.) Fr., *N.*, *S.*

Fomes annosus Fr., *N.*, *R.*, *W.*, *S.*, *F.*, *P.* (on birch).

Ganoderma applanatum (Pers.) Pat., *N.*, *S.*

Poria sanguinolenta (A. & S.) Fr., *R.*, hymenocystis B. & Br., *N.*, xantha (Fr.) Lind, *P.*

Polystictus versicolor (Linn.) Fr., *N.*, *W.*, abietinus (Dicks.) Fr., *N.*

Irpex obliquus (Schrad.) Fr., *F.*, *S.*, *G.*

Lenzites betulina (Linn.) Fr., *W.*

Trametes gibbosa (Pers.) Fr., *W.*, rubescens (A. & S.) Fr., on *Salix*, *G.*

Merulius tremellosus (Schrad.) Fr., *W.*, *P.*

Phlebia merismoides Fr., *R.*

Fistulina hepatica (Huds.) Fr., *N.*

Hydnum repandum (Linn.) Fr., *W.*, *G.*, auriscalpium (Linn.) Fr., *R.*, *W.*, *P.*

Mycoleptodon ochraceum (Pers.) Pat., *S.*

Acia uda (Fr.) Bourd. & Galz., *S.*

Grandinia farinacea (Pers.) Bourd. & Galz. *S.*, granulosa Fr., *S.*

Odontia arguta (Fr.) Quél., *R.*, papillosa (Fr.) Bres., *R.*

Thelephora terrestris Ehrh. ex Fr., *N.*, *R.*, *W.*, *F.*, *P.*, *G.*

Hypochnus fuscus (Pers.) Fr., *S.*, *F.*, fumosus Fr., *R.*, *W.*, *F.*

Sparassis crispa (Wulf.) Fr., *W.*, *S.*, *P.*
Stereum spadiceum Fr., *P.*, hirsutum (Willd.) Fr., *N.*, *W.*, *P.*, rugosum (Pers.) Fr., *R.*, *W.*, *P.*, purpureum Pers. ex Fr., *S.*, *P.*
Hymenochaete Mougeotii (Fr.) Cooke, *N.*, *R.*
Corticium fuciforme (Berk.) Wakef., *N.*, *W.*, arachnoideum Berk., *R.*, Sambuci (Pers.) Fr., *N.*, subcoronatum v. H. & Litsch., *R.*, confine Bourd. & Galz., *R.*, *S.*, praetermissum (Karst.) Bres., *S.*
Peniophora byssoidea (Pers.) v. H. & Litsch., *W.*, velutina (DC.) Cooke, *S.*, setigera (Fr.) Bres., *S.*, hydnoides Cooke & Mass., *R.*, *S.*, gigantea (Fr.) Mass., *N.*, *W.*, incarnata (Pers.) Cooke, *S.*, *W.*, quercina (Pers.) Cooke, *N.*, *P.*
Cyphella capula (Holmsk.) Fr., *S.*
Solenia anomala (Pers.) Fr., *N.*
Clavaria cristata (Holmsk.) Fr., *R.*, cinerea (Bull.) Fr., *S.*, rugosa (Bull.) Fr., *R.*, *W.*, inaequalis (Mull.) Fr., *N.*, fistulosa (Holmsk.) Fr., *S.*, *R.*, *W.*
Pistillaria quisquiliaris Fr., *R.*, *S.*, puberula Berk., *W.*, *S.*
Auricularia auricula-Judae (Linn.) Schroet., *R.*
Exidia glandulosa (Bull.) Fr., *S.*
Tremellodon gelatinosum (Scop.) Pers., *R.*, *S.*
Sebacina incrustans (Pers.) Tul., *P.*, *S.*
Dacryomyces deliquescens (Bull.) Duby, *N.*, *W.*, *S.*
Calocera viscosa (Pers.) Fr., *R.*, *S.*, *F.*, *P.*, cornea (Batsch) Fr., *R.*, stricta Fr., *R.*

GASTEROMYCETES

Cynophallus caninus (Huds.) Fr., *W.*, *P.*, *S.*
Phallus impudicus (Linn.) Pers., *N.*, *R.*, *P.*, *S.*
Lycoperdon saccatum (Vahl) Fr., *W.*, *S.*, umbrinum Pers., *W.*, *S.*, perlatum Pers., *W.*, *S.*, *N.*, pyriforme (Schaeff.) Pers., *S.*, *P.*
Bovistella paludosa (Lév.) Lloyd, *B.*
Geaster triplex Jungh., *S.*
Crucibulum vulgare Tul., *R.*, *S.*, *F.*
Cyathus striatus (Huds.) Pers., *S.*
Scleroderma aurantium Pers., *N.*, *W.*, *P.*
Sphaerobolus stellatus (Tode) Pers., *R.*, *S.*, *P.*

UREDINALES

Uromyces Rumicis (Schum.) Wint., *N.*, *G.*, Acetosae Schroet., *N.*, Valerianae (Schum.) Fuck., *B.*, *G.*
Puccinia calthaecola Schroet. on *Caltha palustris*, *B.*, *G.*, Thalictri Chev., *G.*, Violae (Schum.) DC., *W.*, *P.*, aegra Grove, *F.*, *G.*, Lychnidearum Link, *N.*, Malvacearum Mont., *C.*, Cicutae Lasch, *G.*, Hydrocotyles (Link) Cooke, *W.*, Saniculae Grev., *S.*, Centaureae Mart., *N.*, obtegens (Link) Tul., *F.*, Hypochaeridis Oud., *B.*, Antirrhini Diet. & Holw., *F.*, *C.*, Glechomatis DC., *N.*, *C.*, *P.*, Menthae Pers., *R.*, *G.*, annularis (Str.) Schlecht., *N.*, *R.*, *W.*, *B.*, Polygoni A. & S., *S.*, Buxi DC., *N.*, Caricis (Schum.) Rebent., *G.*, Lolii Niels., *C.*, Magnusiana Körn., *G.*, Phragmitis (Schum.) Körn., *G.*, Poarum Niels., aecidium on *Tussilago*, *S.*, mirabilissima Peck, *F.*, *P.*
Phragmidium violaceum (Schultz.) Wint., *N.*, *W.*, Rubi (Pers.) Wint., *G.*
Kuehneola albida (Kuehn.) Magn., *N.*, *W.*, *F.*, Tormentillae (Fuck.) Arth., *W.*, *B.*
Coleosporium Euphrasiae (Schum.) Wint., *B.*, Senecionis (Pers.) Fr., *W.*, *C.*, Tussilaginis (Pers.) Kleb., *S.*
Cronartium asclepiadeum Fr. on *Tropaeolum majus*, *F.*
Pucciniastrum Agrimoniae (DC.) Tranzsch., *S.*, *G.*, Epilobii (Pers.) Otth, *W.*, *R.*, *S.*, *P.*, *F.*
Melampsoridium betulinum (Pers.) Kleb., *W.*, *R.*, *P.*, *S.*
Milesina Blechni Syd., *W.*

USTILAGINALES

Ustilago Lychnidis-dioicae (DC.) Liro, *N.*, *R.*, longissima (Schlecht.) Meyen, *G.*, utriculosa (Nees) Tul. on *Polygonum hydropiper*, *G.*
Sphacelotheca Hydropiperidis (Schum.) de Bary, *C.*
Tilletia striaeformis (West.) Wint., *P.*

PLECTASCALES

Ctenomyces serratus Eidam, *R.*
Elaphomyces granulatus Fr., *W.*

PYRENOMYCETES

Sphaerotheca Humuli (DC.) Burr. on *Arctium*, *P.*, on *Epilobium*, *G.*, pannosa (Wallr.) Lév., *N.*
Erysiphe Polygoni DC. on *Delphinium*, *N.*, on Swede, *N.*
Microsphaera Grossulariae (Wallr.) Lév., *P.*
Uncinula Aceris (DC.) Sacc., *R.*, *P.*
Phyllactinia corylea (Pers.) Karst. on *Corylus*, *W.*, *P.*
Gibberella pulicaris (Fr.) Sacc. on Broom, *Mousehold Heath.*
Nectria cinnabarina (Tode) Fr., conidial only, on *Ilex*, *W.*, on *Ulex*, *S.*, Desmazierii de Not. on *Buxus*, *N.*, Aquifolii (Fr.) Berk. on *Ilex*, *S.*, punicea (Kunze & Schm.) Fr. on *Ilex*, *S.*
Hyponectria Buxi (Desm.) Sacc. on *Buxus*, *N.*
Hypocrea pulvinata Fuck. on *Polyporus betulinus*, *P.*
Claviceps microcephala (Wallr.) Tul., *S.*
Cordyceps ophioglossoides (Ehrh.) Link, *W.*, capitata (Holmsk.) Link, *R.*, *W.*
Lasiosphaeria hirsuta (Fr.) Ces. & de Not., *G.*
Leptospora ovina (Pers.) Fuck., *S.*
Diaporthe eres Nits. on *Ulex*, *S.*, fibrosa (Pers.) Fuck. on *Rhamnus cathartica*, *G.*, leiphaemia (Fr.) Sacc. on *Quercus*, *S.*
Peroneutypa heteracantha (Sacc.) Berl. on *Acer*, *N.*
Cryptosphaeria eunomia (Fr.) Fuck. on *Fraxinus*, *G.*
Melanconis stilbostoma (Fr.) Tul. on *Betula*, *W.*
Pseudovalsa lanciformis (Fr.) Ces. & de Not. on *Betula*, *R.*
Diatrype disciformis (Hoffm.) Fr. on *Acer*, *N.*, on *Carpinus*, *S.*, Stigma (Hoffm.) Fr. on *Carpinus*, *S.*
Hypoxylon coccineum Bull. on *Fagus*, *W.*, argillaceum (Pers.) Fr. on *Fraxinus*, *G.*, multiforme Fr. on *Pyrus Aucuparia*, *S.*, semiimmersum Nits. on *Quercus*, *W.*
Daldinia concentrica (Bolt.) Ces. & de Not., *F.*
Xylaria Hypoxylon (Linn.) Grev., *W.*, *S.*, *P.*, polymorpha (Pers.) Grev., *N.*, *S.*, *P.*, Tulasnei Nits. on rabbit dung, *W.*
Phyllachora graminis (Pers.) Fuck. on *Dactylis*, *N.*
Rhopographus filicinus (Fr.) Nits., *N.*, *P.*

HYSTERIALES

Gloniopsis curvata Sacc. on *Fraxinus*, *G.*
Hysterium angustatum A. & S. on *Fraxinus*, *G.*

DISCOMYCETES

Helvella crispa (Scop.) Fr., *R.*, *W.*, *S.*, *F.*, lacunosa Afz., *S.*
Macropodia macropus (Pers.) Fuck., *W.*
Rhizina inflata (Schaeff.) Karst., *P.*
Galactinia badia (Pers.) Boud., *W.*, *P.*
Otidea onotica (Pers.) Fuck., *N.*
Geopyxis carbonaria (A. & S.) Sacc., *P.*
Peziza aurantia Pers., *N.*, *R.*

Pulvinula constellatio (Cooke) Boud., *S.*
Saccobolus violascens Boud., *S.*
Taphrina Tosquinetii (West.) Magn., *W.*
Leotia lubrica (Scop.) Pers., *W.*
Cudoniella acicularis (Bull.) Schroet., *R.*, *S.*
Coryne sarcoides (Jacq.) Tul., *W.*, *S.*
Bulgaria inquinans (Pers.) Fr., *N.*, *P.*
Corynella atrovirens (Pers.) Boud., *S.*
Orbilia xanthostigma Fr., *W.*
Phialea echinophila (Bull.) Quél., *S.*, firma (Pers.) Gill., *S.*
Chlorosplenium aeruginosum (Oeder) de Not., *S.*, on beech.
Helotium fructigenum (Bull.) Fuck., *R.*, *S.*
Trichoscypha calycina (Schum.) Boud., *W.*
Mollisia cinerea (Batsch) Karst., *S.*, *P.*
Phacidium multivalve (DC.) Kunze & Schm., *W.*
Stegia Ilicis Fr., *W.*, *S.*
Rhytisma acerinum (Pers.) Fr., *N.*, *F.*, *P.*

PHYCOMYCETES

Syzygites megalocarpus Ehrenb., *W.*, *S.*
Bremia Lactucae Regel, *S.*
Plasmopara nivea (Unger) Schroet., on *Aegopodium*, *P.*
Peronospora alta Fuck., on *Plantago*, *F.*
Entomophthora echinospora Thaxter, on fly, *P.*

DEUTEROMYCETES

Dendrophoma pruinosa (Fr.) Sacc. on *Fraxinus*, *G.*
Actinonema Rosae (Lib.) Fr., *N.*
Eleutheromyces subulatus (Tode) Fuck. on *Sparassis*, *W.*
Septoria Violae West. on *Viola Riviniana*, *W.*
Cylindrium flavovirens Bon., *R.*
Trichoderma viride Fr., *N.*
Rhinotrichum Thwaitesii B. & Br., *W.*, *P.*
Sepedonium chrysospermum (Bull.) Fr., *N.*, *R.*
Ovularia obliqua (Cooke) Oud., *S.*, *P.*, haplospora (Speg.) Magn. on *Alchemilla arvensis*, *N.*
Botrytis cinerea Pers., *R.*
Cephalosporium coccorum Petch, on Mealy Bugs, *S.*
Acremonium album Preuss on *Stemonitis*, *S.*
Gliocladium penicillioides Corda on *Gibberella*, *Mousehold Heath.*
Chalara fungorum Sacc. on *Eleutheromyces*, *W.*
Ramularia Urticae Ces., *W.*, acris Lindr. on *Ranunculus acris*, *P.*, Tulasnei Sacc., *S.*, calcea (Desm.) Ces., *N.*, *R.*, *F.*, *P.*, sambucina Sacc., *N.*, *P.*, Primulae Thuem., *N.*
Napicladium arundinaceum (Corda) Sacc., on *Phragmites*, *G.*
Stilbella erythrocephala (Ditm.) Lindau, *N.*, *F.*, *W.*
Tilachlidium tomentosum (Schrad.) Lindau, on *Cribraria*, *R.*, *W.*, *S.*, on *Comatricha*, *R.*
Isaria (Tilachlidium) brachiata (Batsch) Schum., on decaying Agaric, *R.*, (Spicaria) farinosa (Holmsk.) Fr., on pupae, *R.*, *W.*, *P.*
Gibellula aranearum (Schw.) Syd. on spider, *P.*
Sporocybe Azaleae Peck, *N.*, *W.*
Tuberculina persicina (Ditm.) Sacc., on *Puccinia Poarum*, *S.*, on *P. Antirrhini*, *Norwich.*
Volutella Buxi (Corda) Berk., *P.*
Anthina flammea Fr., *S.*
Ectostroma Iridis (Ehrenb.) Fr. on *Iris pseudacorus*, *G.*

MYCETOZOA FOUND DURING THE NORWICH FORAY

By H. J. HOWARD

The summer had been characterised by conditions unfavourable to the development of Mycetozoa, but a week's rain previous to the foray and rain at the end of almost every day caused several species to appear and a total of thirty-six was recorded.

October 2nd. A visit was made to Northrepps Hall Woods, which consist chiefly of beech with very few old logs: nothing of outstanding importance was gathered. The afternoon, spent in West Runton woods where a number of pine logs were present, produced *Tubifera ferruginosa* and *Cribraria vulgaris*.

October 3rd was a dull day and the extensive Westwick woods were visited: these consist of heathland, with pine wood and *Sphagnum* under birches. It is probable that it was on this day that the new British record of *Physarum javanicum* was made by Miss Cayley, who collected this species on bark with *Parmelia* sp. Owing to its superficial resemblance to *Physarum nutans* it was taken for that species, but on being sent to Miss Lister the discoid sporangia with the deposits of lime uniformly distributed in the walls and not clustered to form spots as in all varieties of *P. nutans* led to its identification. Later in the afternoon the North Walsham woods were explored in the same neighbourhood.

October 4th. Stratton Strawless woods, with mixed growth of beech, birch, hornbeam, oak, chestnut, bramble and bracken, with numerous clearings, yielded a variety of Mycetozoa. The journey was continued to Buxton Heath, but a rain storm prevented extensive searching there.

October 5th. Sprowston and Plumstead Road Woods and Framingham Chase proved somewhat unfruitful. The afternoon, however, provided an interesting diversion, for a chance meeting with Mr J. Morse of Eaton resulted in a visit to his cucumber-houses where *Physarum gyrosum* was seen in abundance, both in the plasmodium and fruiting stages. Sticks, soil and stems of cucumbers were covered with rosettes of this species and sometimes the considerable patches of plasmodium had crept up the pots standing upon the soil. This species has occurred in these glasshouses in great abundance on several occasions and, it is interesting to note, always in houses manured with sewage sludge and never in others adjacent treated with farmyard manure. A piece of soil covered with creamy white veins of plasmodium was taken home which next day was found to have changed

to "clear Amazonite blue" as described by M. K. Minakata from Tanabe, Japan. Unfortunately instead of being allowed to mature naturally, the mass was placed in a very moist incubator in order to imitate the conditions of the cucumber house, and the temperature being too high, the plasmodium was injured and turned to a blood-red colour in drying. I am inclined to think that the plasmodium normally changes to blue before forming sporangia, but hope to make confirmatory observations should the species appear again. *Fuligo septica* var. *candida* was also found maturing upon cucumber stems.

N. = Northrepps Hall Woods; *R.* = West Runton Woods; *W.* = Westwick and North Walsham Woods; *S.* = Stratton Strawless Woods; *P.* = Sprowston and Plumstead Road Woods; *F.* = Framingham Chase; *E.* = cucumber houses at Eaton, Norwich.

Ceratiomyxa fruticulosa (Muell.) Macbr., *N.*, pine wood.
Badhamia utricularis Berk., *S.*, dead pine wood.
Physarum nutans Pers., *N.*, *W.*, dead wood, var. leucophaeum Lister, *S.*, *F.*, dead wood.
P. javanicum Racib., *W.*?, bark with lichen.
P. gyrosum Rost., *E.*, soil, stems, pots, in cucumber houses.
P. bitectum Lister, *W.*, old larch.
Fuligo septica (L.) Gmel., *N.*, *R.*, *W.*, *F.*, dead wood, var. candida Lister, *N.*, pine wood, *E.*, cucumber stems.
Craterium minutum (Leers) Fr., *W.*, *S.*, dead leaves, etc.
C. leucocephalum Ditm., *W.*, holly leaves.
Leocarpus fragilis (Dicks.) Rost., *W.*, *S.*, beech leaves, twigs.
Diderma hemisphericum (Bull.) Hornem., *W.*, twigs and alder leaves.
Diachaea leucopoda Rost., *S.*, twigs and leaves.
Didymium difforme (Pers.) Duby, *W.*, dead leaves.
D. Clavus (A. & S.) Rost., *N.*, *S.*, dead leaves.
D. melanospermum (Pers.) Macbr., *W.*
D. nigripes Fr. var. xanthopus Lister, *W.*, *S.*, alder twigs, etc.
Mucilago spongiosa (Leysser) Morg., *W.*, *S.*, grass.
Stemonitis fusca Roth, *W.*, *S.*, dead wood.
S. splendens Rost. var. flaccida Lister, *W.*, alder.
S. herbatica Peck, *R.*, twigs and leaves.
S. flavogenita Jahn, *S.*, *P.*
Comatricha nigra (Pers.) Schroet., *W.*, *S.*, *P.*, birch, etc.
C. typhoides (Bull.) Rost., *S.*, dead wood.
Enerthenema papillatum (Pers.) Rost., *W.*, *S.*, *P.*, dead wood.
Cribraria argillacea Pers., *S.*, dead wood.
C. rufa (Roth) Rost., *R.*, pine wood.
C. vulgaris Schrad., *R.*, *W.*, *S.*, *F.*, pine wood, var. aurantiaca Pers., *R.*, *S.*, pine wood.
Licea flexuosa Pers., *N.*, *S.*, green slimy pine log, etc.
Tubifera ferruginosa Gmel., *N.*, *R.*, *W.*, *S.*, *F.*, dead pine wood.
Lycogala epidendrum Fr., *E.*, twigs in cucumber house.
Trichia persimilis Karst., *N.*, dead wood.
T. varia Pers., *W.*, *S.*, dead birch, etc.
Arcyria cinerea (Bull.) Pers., *W.*, *F.*, dead wood.
A. denudata Wettst., *W.*, *S.*, birch, etc.
A. incarnata Pers., *N.*, *R.*, *W.*, *S.*, dead wood.
A. nutans (Bull.) Grev., *R.*, dead wood.

NORFOLK LICHENS

By H. H. KNIGHT

The Norfolk woods visited during the Foray were not very rich in lichens, and in the woods near Norwich visited on Friday, particularly those of Sprowston and Plumstead, the trees were very bare. *Graphis elegans* and *scripta* were seen in Stratton Strawless woods, but nowhere else, and no species of *Opegrapha* was seen on trees. *Lecidea lucida* occurred on a brick wall in the woods near Overstrand. This is a lichen which appears to be spreading from its natural habitat on siliceous rocks to brick walls, and is sometimes found even on town walls in the Midlands.

On October 6th I visited the Marams near Blakeney with Dr Watson. On the stones here a number of saxicolous lichens were found. *Physcia ciliaris*, usually a tree lichen, was growing on the ground, and *Placodium luteoalbum*, which prefers elms, was growing on the stems of *Suaeda fruticosa*.

In the following list I have as usual followed the order and naming of the *Monograph of the British Lichens*, by Miss A. Lorrain Smith. Without the help of Dr Watson the list would have been much shorter.

O. = Overstrand and Runton Woods; *W.* = Westwick and North Walsham Woods; *S.* = Stratton Strawless Woods; *B.* = Walls and trees near Woodrow Inn and Buxton Heath; *P.* = Plumstead and Sprowston Woods; *F.* = Framingham Woods; *M.* = The Marams near Blakeney and walls near Cley; *C.* = Common lichens.

Chaenotheca melanophaea Zwackh., *S.*, *F.*
Calicium hyperellum Ach., *S.*, *M.*
Cyphelium inquinans Trev., *O.*
Peltigera canina Willd., *O.*, *W.*, *M.*
P. polydactyla Hoffm., *W.*, *F.*
Parmelia physodes Ach., *C.*
var. platyphylla Ach., *F.*
P. perlata Ach., *O.*, *S.*
P. caperata Ach., *W.*, *S.*, *F.*
P. subaurifera Nyl., *S.*
P. sulcata Tayl., *C.*
P. dubia Tayl., *S.*
P. revoluta Floerke, *W.*, *S.*
P. acetabulum Dub., *F.*
P. fuliginosa Nyl., *F.*, *M.*
var. laetevirens Nyl., *C.*
Cetraria aculeata Fr., *M.*
Evernia prunastri Ach., *C.*
Ramalina calicaris Fr., *S.*
R. fastigiata Ach., *S.*
Ramalina farinacea Ach., *C.*
R. pollinaria Ach. f. humilis Cromb., *B.*, *F.*
Xanthoria parietina Th. Fr., *C.*
var. aureola Th. Fr., *S.*, *M.*
X. polycarpa Oliv., *W.*, *M.*
X. lychnea Th. Fr., *B.*, *F.*
Placodium flavescens A. L. Sm., *M.*
P. murorum DC., *B.*, *M.*
var. pusillum Flag., *M.*
P. lobulatum A. L. Sm., *M.*
P. citrinum Hepp, *B.*, *M.*
P. phloginum A. L. Sm., *S.*
P. aurantiacum var. flavovirescens Hepp, *M.*
P. luteoalbum Hepp, *M.*
P. atroflavum A. L. Sm., *M.*
Candelariella vitellina Müll.-Arg., *C.*
Physcia ciliaris DC., *M.*
P. pulverulenta Nyl., *M.*
P. grisea A. Zahlbr., *S.*

Physcia hispida Tuckerm., *S.*, *M.*
P. caesia Nyl., *B.*
P. orbicularis var. virella Dalla Torre & Sarnth., *B.*, *M.*
Rinodina demissa Arn., *M.*
R. umbrinofusca Oliv., *M.*
Lecanora muralis Schaer., *B.*
L. subfusca Ach., *O.*, *P.*
var. chlarona Ach., *S.*, *F.*
var. allophana Ach., *S.*
L. rugosa Nyl., *S.*
L. intumescens Koerb., *P.*
L. campestris B. de Lesd., *B.*, *M.*
L. atra Ach., *M.*
L. Hageni Ach., *S.*, *F.*, *M.*
L. umbrina Massal., *M.*
L. galactina Ach., *B.*, *M.*
L. dispersa Nyl., *M.*
L. varia Ach., *C.*
L. conizaea Nyl., *F.*
var. conizaeoides A. L. Sm., *S.*, *P.*, *F.*
L. symmictera Nyl., *B.*, *F.*, *M.*
L. expallens Ach., *S.*
Lecania prosechoides A. L. Sm., *M.*
L. erysibe Mudd, *M.*
Pertusaria globulifera Nyl., *S.*
P. faginea Leight., *C.*
P. pertusa Dalla Torre & Sarnth., *C.*
Phlyctis agelaea Koerb., *S.*, *F.*
Baeomyces rufus DC., *W.*, *F.*
Cladonia sylvatica Hoffm., *O.*, *B.*
C. foliosa Willd., *M.*
C. pyxidata Hoffm., *C.*
var. chlorophaea Floerke, *S.*, *F.*
C. fimbriata Fr., *C.*
var. simplex Wain., *F.*
var. radiata Cromb., *S.*, *F.*
var. subcornuta Nyl., *F.*
C. ochrochlora f. ceratodes Floerke, *B.*
C. pityrea Fr., *B.*
C. crispata Flot., *B.*
Cladonia furcata Schrad., *C.*
var. spinosa Leight., *M.*
var. recurva Hoffm., *B.*
C. rangiformis Hoffm., *M.*
var. foliosa Wain., *M.*
C. squamosa Hoffm., *S.*
C. digitata Hoffm., *W.*, *F.*
C. coccifera Willd., *B.*
C. flabelliformis Wain., *F.*
C. macilenta Hoffm., *B.*, *F.*
C. Floerkeana Fr. var. carcata Wain., *B.*
Gyalecta diluta Wain., *P.*, *F.*
Lecidea lucida Ach., *O.*
L. coarctata Nyl., *F.*
L. quernea Ach., *S.*
L. granulosa Schaer., *C.*
L. flexuosa Nyl., *W.*
L. uliginosa Ach., *S.*
L. fuliginea Ach., *S.*
L. dubia Hook., *M.*
L. expansa Nyl., *M.*
Biatorina Griffithii Massal., *S.*, *P.*, *F.*
B. erysiboides Th. Fr., *F.*
B. Lightfootii var. commutata Mudd, *S.*
B. lenticularis Koerb., *M.*
B. chalybeia Mudd, *M.*
Bacidia phacodes Mudd, *S.*
Buellia canescens De Not., *B.*, *M.*
B. myriocarpa Mudd, *B.*, *M.*
B. stellulata Mudd, *M.*
B. confervoides Kremp., *M.*
Rhizocarpon confervoides DC., *M.*
Graphis elegans Ach., *S.*
G. scripta Ach., *S.*
Verrucaria maura Wahlenb., *M.*
V. microspora Nyl., *M.*
V. viridula Ach., *B.*, *M.*
V. nigrescens Pers., *M.*
V. mutabilis Borr., *F.*
V. muralis Ach., *F.*
Acrocordia epipolaea A. L. Sm., *B.*

PRESIDENTIAL ADDRESS

By B. BARNES, D.Sc., Ph.D., F.L.S.

INDUCED VARIATION

Probably ever since man has concerned himself with domesticated plants and animals, he has tried to improve his stocks. Much success has been attained by judicious selection and by systematic breeding from chance variations of a desirable kind which turned up in the animals and plants, and efforts have been made by artificial means to provoke variations. There is a traditional method of obtaining variation by the simultaneous use of high feeding, relatively high temperatures and crowding; this method seems to have been effective in dealing with cultivated plants, and the Chinese are said to have brought about much alteration in gold fish by keeping them in confined spaces in dirty conditions. Darwin, in his *Variation under Domestication*,* refers to the general opinion among plant breeders that a stock of plants must be grown on poor land if it is to be kept true. Such ideas, widely held by practical men whose living depends on success with their plants and animals, must be based on a good deal of experience, and cannot be disregarded, but the traditional methods appear to be slow and capricious in their operation, and do not seem capable of much control.

In the second half of the nineteenth century, some scattered work was done on the experimental induction of variation, but at that time there was little sympathy with any work which tended to upset the idea of the fixity of species, a somewhat strange position, since variability, and very great variability, was accepted without difficulty in domesticated creatures. A growing realisation that experiment was necessary in order to get a better understanding of the mechanism of evolution, and the development of Mendelism, combined to awaken interest in variation, and stimulated efforts to discover if the rate of change in organisms could be influenced by direct treatment with physical or chemical agents, since the successful outcome of such experiments might well throw light on the nature of evolutionary changes, and also free the breeder from the necessity of waiting until some chance variant fell into his hands. Up to the present, we have not made much progress in elucidating the mysteries of evolution, and it is not clear that the breeder has been much helped, but a number of workers, using many kinds of plants and animals, have shown, during the present century, that changes can be induced by the use of chemicals, by the application of high tem-

* Darwin, C., *Variation under Domestication*, II (1905), 300–3. London: Murray.

peratures, by dosage with X-rays and with emanations from radium, by exposure to ultra-violet light, and, probably, by taking advantage of some slow changes going on within the organisms. There is no evidence at present that any of the agents found to be effective have any specific effect; similar variations have been induced in the same stock of the same organism after treatment with high temperatures or after exposure to X-rays. The experimental results have been and continue to be erratic, since the work is difficult, and since, so far, no one has invented a technique capable of exact application. Even with such simple things as bacteria and fungal spores, it is impossible to be sure that the material is homogeneous and that the treatment is evenly applied; with seeds of the higher plants, with growing plants, and with the eggs, and other developmental stages of animals, standardisation of the experimental material is impossible. Although as yet we have no means of repeating an experiment with a reasonable expectation of repeating the results of previous similar experiments, the failure of one worker to repeat exactly the work of another does not mean that the results of either are valueless.

The simple organisation of the fungi, and the ease with which they are grown in pure culture, makes these organisms very suitable subjects for experiments on induced variation, and fungi have afforded as satisfactory evidence as have any group of organisms that variation can be induced. Hansen,* well known for his work on yeasts, produced the first good evidence of the induction of variation in a fungus. He developed a sound technique for the isolation of single cells, and for the maintenance of pure cultures started from single cells. After he had shown that yeasts continued to bud at a temperature a few degrees higher than the maximum temperature at which they could form spores, Hansen succeeded in producing a non-sporing race from a richly sporing stock of a wine yeast (Johannisberg II of Wortmann, probably a form of *Saccharomyces ellipsoideus*) by prolonged culture at a temperature between the maximum for spore formation and the maximum for budding. The original material lost the power of sporulation gradually, but, after working for about three months with cultures which were renewed every few days, he obtained a race which did not form spores, no matter how it was fed or treated; this race was kept in culture for sixteen years, and during that time did not regain the power of sporulation. Since the original yeast was distinguished by its rich sporulation, and since Hansen could never show that it produced non-sporing cells in ordinary culture, he fairly concluded that the asporogenous race had come into existence because his experiments had caused a change, and that it had not been grown from a non-sporing cell present in the original material, and accidentally selected as a starting point for the cultures.

* Hansen, E. C., *C.R. Lab. Carlsberg*, II (1883), ii; *Ann. Bot.* IX (1895), 549.

Aspergillus niger has long been a favourite subject for experiments with fungi; a Continental writer once called it the mycologist's guinea-pig. *A. niger* has yielded induced variants after exposure to high temperatures, and after treatment with chemicals. In 1912, Schiemann* gave a very thorough account of changes produced in a stock of the fungus, a stock well known to be constant in ordinary culture. She distinguished carefully between modifications due to the use of special conditions, and only appearing so long as the special conditions were operative, and true permanent changes. For example, media containing copper sulphate in a concentration of 1/1000, and known to be of a kind very favourable to the growth of the fungus when copper sulphate was not present, bore weak whitish colonies with poor crops of conidia; these weak colonies were however nothing more than modifications, for, conidia taken from them and planted on ordinary media yielded the normal *A. niger* at once. On the other hand, the addition of potassium bichromate to the medium sometimes caused the appearance of a true variant. It was found that although some growth was possible on media containing potassium bichromate in a concentration greater than 1/2000, such concentrations prevented the forming of conidia. On media whose content of the salt was just below that necessary to prevent sporulation, germination was greatly delayed (taking sixteen days instead of about a day), and fruiting was tardy (needing twenty-eight days instead of three to four). One of the first cultures made on a medium of this kind yielded some rusty brown conidial heads among the normal blackish heads, and the light-coloured heads yielded a variant which was still alive in culture in 1929, and may be so still, developing its light-coloured heads on ordinary media, free from bichromate. The early isolations of the variant, on ordinary media, showed colour fluctuations about the average chocolate-brown, but these fluctuations were inconstant and could not be transmitted to further cultures. Such initial instability is a common feature when variants are settling down after their first appearance.

A cinnamon-brown variant appeared after *A. niger* had been passed through eleven successive cultures on a medium containing potassium bichromate in a concentration of 1/20,000; the early isolations were unstable, and went through several transfers before settling into a permanent variant.

Schiemann also tried the effects of high temperatures. When *A. niger* was grown on an ordinary medium at 40–45° C., the growth was specially dense, the conidiophores were dwarfed, and other irregularities were noted; transfers from these cultures to an ordinary medium kept at 36° C., a temperature specially favourable to the growth of the fungus, always gave the normal form. Some cultures

* Schiemann, E., *Zeitschr. f. induk. Abstamm. u. Vererb.* VIII (1912), 1.

were heated for a time to 48° C., and this treatment led to the appearance of true variants. From one of these cultures, a form was isolated showing characters the reverse of those shown by the high-temperature modifications of the species, for the variant grew loosely, produced conidiophores two to three times as long as normal conidiophores, and bore conidial heads slightly larger than normal heads. It follows that modifications due to some special treatment are not necessarily steps towards the formation of a permanent variant under the influence of similar treatment.

Another heated culture produced a greyish head of conidia, and these conidia, planted out separately, yielded some colonies in which sectors appeared, the sectors fruiting later than the rest of the colony. Isolations from the sectors gave a form whose behaviour was inconstant; the first colonies grew weakly and irregularly, but as successive cultures were made, the fungus slowly gained strength. The colonies of this variant were very sensitive to slight differences in the composition and the moisture content of the medium, giving modifications readily, and, in this respect, the variant was more responsive than the stock strain of *A. niger*. The variant germinated and grew well at temperatures too low for the best growth of the parent strain, and was always late in sporing. Young colonies produced greyish brown conidial heads, but on older colonies pigmentation was usually normal. Transfers from young colonies gave the unstable variant; transfers from old colonies gave normal *A. niger*. These phenomena are of special interest; they suggest that the variant was not much altered, and that it had suffered a mild amount of change from the heating, so mild that recovery was possible after a mycelium had grown for a time. Abnormalities in youth followed by an apparent resumption of normal features at a later stage have been encountered in the induced variants of other organisms.

Schiemann's work shows clearly that a given species may be made to yield a series of forms ranging from modifications depending solely for their appearance on special conditions of culture, to pronounced variants with a great degree of permanence.

Waterman* encountered variation in *A. niger* during an attempt to discover substances which were specially good sources of carbon for the fungus. One such substance, para-oxybenzoic acid, used in conjunction with the necessary mineral salts, was found at first to serve the fungus well, and to lead to the storage of much glycogen within the hyphae. Discrepancies began to appear in the chemical determinations however, and these were traced to the formation of variants under the influence of the para-oxybenzoic acid. *A. niger* was also found to vary after treatment with substances which checked its growth, so that both substances apparently favourable to growth and

* Waterman, H. J., *Z. GärPhysiol.* III (1913), 1.

substances certainly unfavourable to growth led to the development of variants. An example such as this indicates the complexity of the position and suggests that the mechanism underlying induced variation can hardly be reduced to one universal explanation.

Haenicke* isolated light-coloured forms of *A. niger* from cultures which had been kept at 45° C.; one was accidentally killed after it had lasted through nine transfers, the other suddenly reverted to normal after retaining its aberrant characters through eighteen successive cultures.

Between 1926 and 1932, many experiments were made† on the effect of high temperatures on *Eurotium herbariorum*, *Botrytis cinerea* and *Thamnidium elegans*. Well established strains of the three species were available, all known to be constant under ordinary conditions of culture. Spores taken from pure cultures, with precautions to avoid contamination, were heated in various ways and then planted on the usual media; at the same time unheated spores were planted on other dishes of the same media. The experiments yielded a considerable number of variants from the heated spores, while none was seen in the cultures from unheated spores. Since, during some years of culture, the three stocks had never thrown aberrant forms, it seems a fair conclusion that the development of variants in cultures started from heated spores must be due to the treatment given to the spores. *Eurotium herbariorum* responded best to treatment, no doubt because it offered the most possibilities for change, for the strain used readily formed conidia and perithecia in culture. Some of the variants were slight, and apparent only in young colonies; most of the slight variants reverted sooner or later to the normal form, persisting even in young colonies only through a few transfers. At the other end of the scale, some of the variants obtained in 1926 were still in existence, unchanged, in 1933, having kept their characters through more than 140 transfers made on ordinary media and started from unheated spores. The changes affected the rate of growth, the colour and morphology of the conidia and conidiophores, the colour, form and abundance of the perithecia, the form of the ascospores, and indeed every obvious morphological character of the fungus was changed in one variant or another; though the matter was not investigated systematically, variations in staling capacity, and variations in the extent to which the medium was stained, suggested that physiological characters had also been altered. Some variants were slightly unstable, with a tendency to sectoring, and, in one, sectoring was certainly stimulated by a change of medium. Isolations from these sectors gave another variant, evidently a weakened version of the first; it remained

* Haenicke, A., *Z. Bot.* VIII (1916), 225.

† Barnes, B., *Ann. Bot.* XLII (1928), 783; XLIV (1930), 825; *Trans. Brit. mycol. Soc.* XIX (1935), 291.

distinct from its parent for some eighteen months, but slowly reverted to the form of the original variant, but not to that of the stock *Eurotium herbariorum*. A brown variant was particularly distinguished by the heavy production of a sterile, white aerial mycelium on old colonies. Another, with conidia not greatly different in colour from those of the normal form, always showed some deformations of the conidial apparatus and never developed perithecia; this variant, and another which formed but few perithecia, stained the medium heavily. It was not possible to demonstrate that there was any general tendency in the variants for characters to be changed in groups, though variants which were able to develop good crops of perithecia seldom produced much aerial mycelium, and they also showed little tendency to stale, or to stain the medium.

Botrytis cinerea offered less possibility of change; alterations were remarked in the general habit, in the form, colour and abundance of the sclerotia, and in the morphology of the conidial apparatus. Some of the variants were extremely unstable when first isolated, and one notable variant was sterile, very weak, and so deficient in strength that it died out after a few transfers. Other variants remained recognisable for more than two years, gradually reverting to normal as time went on, and still others, in particular one that formed dense white colonies, appeared to be permanent. Staining of the medium and the production of much whitish aerial mycelium was most apparent in the variants which developed few or no sclerotia, and if the reasonable assumption be made that the sclerotia of *Botrytis* have some relation to sexual phenomena, we then have in these variants a parallel with some variants of *Eurotium herbariorum*.

Variants of *Thamnidium elegans* were obtained from heated sporangiospores, and they too showed a range from transient to apparently permanent forms. Partial sterility and increase of aerial mycelium characterised the more stable variants, but despite very marked alterations in morphology, all attempts to demonstrate any effect on the sexual reactions, by growing the variants in contrasted cultures, were fruitless; thus, in Zygomycetes, a difference in morphology between two strains of a heterothallic species does not necessarily indicate a difference in sexual character.

An attempt was made during the investigation of the three species just discussed, to establish a relation between the severity of the initial heating and the frequency of variation, and between the severity of treatment and the degree of alteration. Conclusive evidence was not obtained, for many thousands of experiments would be needed to settle the point, but it appeared that exposure to heat just insufficient to kill the spores was most likely to produce the greatest number of striking alterations.

Experiments with heated ascospores of *Eurotium herbariorum* did not

succeed. Bean and Brooks* were unable to cause variation in *Pyronema confluens* by heating the ascospores, and Dickson† had the same experience with the ascospores of *Chaetomium cochliodes*, though he found that these spores produced many variants after treatment with X-rays.

Irradiation with X-rays has provoked variation in many organisms, including fungi; as usual, the results of the experiments have been erratic. Nadson and Philippov‡ irradiated young mycelia of several species of Zygomycetes, with noteworthy effect; disturbances were noted in the amount of the crops of sporangia and zygospores, and in pigmentation. Isolations from treated mycelia of *Mucor genevensis* yielded sectoring colonies, and cultures from the sectors gave variants of greater or less permanency. An interesting variant of *M. genevensis* was first noted as a sector bearing very few zygospores and having globules of reddish yellow oil in the hyphae. Subsequently, a similar variant was obtained from irradiated material of *Zygorhynchus Moelleri*; it formed no zygospores, developed a heavy crop of sporangia, and showed the yellow hyphal inclusions. The connection between disturbances of fertility and the development of pigmentation suggests a parallel with fungi already considered, and further, the induction of reduced fertility and yellow pigmentation in Zygomycetes is of interest, since these characters may appear in ordinary cultures of some Zygomycetes when the general conditions are unfavourable to the fungus. For example, when *Sporodinia grandis* is transferred from its host to potato agar, it often happens that growth falls off after a few transfers; the number of matured reproductive structures then diminishes and both sporangia and zygospores may be replaced by abortive rudiments containing a yellowish pigment and the stock usually dies out. *Phycomyces Blakesleeanus* may show similar but less striking behaviour on unsuitable media. It seems a reasonable conclusion that the likeness between characters following irradiation and characters known to be indicative of unfavourable conditions for growth, shows that irradiation causes damage to the general balance of the fungi concerned.

We owe a very thorough study of the effect of X-rays on fungi to Dickson,§ who worked with both mycelia and spores. He records noteworthy results with *P. Blakesleeanus*, and with several species of *Chaetomium*.

Six hundred subcultures from fifty-eight irradiated plates of *Phycomyces Blakesleeanus* produced seventeen sectoring colonies; eleven

* Bean, W. J. and Brooks, F. T., *New Phytol.* xxxi (1932), 70.

† Dickson, H., *Ann. Bot.* xlvi (1932), 389.

‡ Nadson, G. A. and Philippov, G. S., *C.R. Soc. Biol.*, Paris, xciii (1925), 473; *J. Soc. Bot. Russe*, xiii (1928), 221.

§ Dickson, H., *Ann. Bot.* xlvi (1932), 389; xlvii (1933), 735.

variants were isolated from the sectors. Two, from heavily dosed cultures, did not form sporangia, and gave very few zygospores when mated with the appropriate strain of the parent form—this had not been irradiated. An orange pigment developed in the mycelium. Similar variants appeared in the progeny from less heavily dosed mycelia, so that dosage alone is not the decisive factor. Some variants from moderately dosed cultures were distinguished at first by the abundant and precocious crops of sporangia, but, after three months of culture, these variants were reverting to the parent form.

More productive experiments were made with *Chaetomium cochliodes*. Preliminary observations on more than seven hundred cultures indicated that the stock had no marked tendency to vary in ordinary culture. Young and old mycelium was irradiated, and it was found that variations arose about two and a half times as often from old mycelium as from young mycelium, both having been equally exposed to treatment. Since subcultures from old mycelium, suitably irradiated, gave 92 per cent. variation, there can be little question of the efficacy of X-rays in bringing about change. Treatment of the mycelium of variants led to the appearance of still more variants, some of which seemed to have resumed normal characters. If true reversion did in fact occur, it is difficult to account for these results by supposing that the X-rays had knocked out a gene or destroyed a piece of a chromosome, but this matter cannot be discussed profitably in this place.

In all, Dickson observed some hundreds of variants, and thirty-eight were grown in pure culture; five of these were more or less unstable, the others seemed to be permanent. The changes affected the colour, dimensions, morphology, fertility and staining of the medium; some variants were more fertile than the stock, some less so, and some were sterile, but there was no general relation between increase of sterility and stronger staining of the medium. It appeared that the characters of the parent stocks were not changed in association with one another, except that, when fertility was much reduced, much whitish aerial mycelium might form; this phenomenon has already been noted in fungi after treatment by heat.

Irradiation of suspensions of ascospores did not greatly affect the subsequent germination of the spores, but it had a pronounced effect on survival beyond the earliest stages, for with increase in the length of exposure to the rays there was marked decrease in the number of large mycelia formed. Many of the spores which did establish themselves yielded variants, and the number of variants increased with increase in the time of treatment.

There can be no doubt that X-rays provide a convenient and productive means of inducing variation in fungi. That this is so is well demonstrated by Dickson's investigation of seven species of *Chaet-*

omium; all species gave variants from treated spores, but all did not respond equally strongly. Two of the species were observed to form sectors in ordinary culture, but when the mycelia of these species were irradiated, one species varied seven times as frequently as the other. Dickson had already found that species of *Fusarium*, known to vary greatly in ordinary cultures, were not notably responsive to X-rays; this shows that instability under ordinary culture conditions is no indication that the fungus will react with special readiness to abnormal stimulation.

Dickson tested the effect of ultraviolet light on the mycelium and spores of *Chaetomium cochliodes*. The mycelium seemed to be unaffected, but treated ascospores gave about thirteen variant colonies for every hundred colonies subcultured. Many spores were killed outright. The variants were like those which appeared after the use of X-rays.

From many points of view the fungi are not the most suitable subjects for experiments on induced variation. Their simple organisation seems to be all in favour of reaction, and their rapid growth shortens the time necessary for experiments. On the other hand, the vegetative nuclei are small, and cytological work furnishes more conjectures than facts. Normal sexual processes are commonly absent, so that satisfactory breeding experiments are not possible, and though genetic investigations might be undertaken with some of the Phycomycetes, it is to be remembered that the resting spores of these fungi, formed after a sexual union, do not usually germinate readily. It is therefore fortunate that we can turn to work on induced variation in other organisms, and so supplement the impressions gained from work on fungi.

We may first consider the insects. In the latter years of last century some experiments were made by rearing larvae and pupae of Lepidoptera at high temperatures.* It was shown that by such methods some of the butterflies of Central Europe could be converted into forms comparable with races of the same species characteristic of parts of southern Europe. Heat treatment also yielded specimens with colour patterns suggesting a sort of generalisation of the patterns running through a number of species of the genus; it may be recalled that Dickson noted a tendency towards generalisation during his investigation of seven species of *Chaetomium*. There was some evidence that the induced characters in the butterflies were inheritable, but that side of the work was not pursued.

Much more recently, work on melanism in moths, by Harrison and Garrett,† has provided remarkable evidence on the induction of variation and its transmission to offspring. It has been known for a

* Standfuss, M., *N. Denkschr. schweiz. Ges. Naturwiss.* xxxvi (1899), i, 1; *Ann. Soc. ent. Fr.* lxix (1900), 82.

† Harrison, J. W. H. and Garrett, F. C., *Proc. roy. Soc.* B, xcix (1926), 241.

long time that some moths which are light coloured in rural surroundings remote from towns, are represented in industrial areas by very dark forms, and the development of these dark forms appears to have gone on side by side with the growth of industrialism. Analysis of the smoke begrimed leaves of the food plants of some melanic moths showed that the dust contained lead and manganese. Light coloured moths were obtained from rural areas where melanism was unknown, and after breeding tests had shown that melanism was apparently absent from the stocks, larvae from these stocks were fed on contaminated foliage. Ultimately, melanic moths appeared in the insects so reared, and the melanism was found to act as a Mendelian recessive. This work provides clear evidence of the induction of variation and of the transmission of the variation through a normal sexual process.

Flies belonging to the genus *Drosophila* have been much used in genetical work, and experiments have led to the induction of variation in members of this genus. Goldschmidt* procured a stock of *D. melanogaster* from Morgan, taken from a race whose history was well known. Mating flies were placed in flasks, and removed after eggs had been laid. Some lots of eggs were placed at 37° C. for some hours, and then kept at 25° C., to allow of further development; other lots were kept at a steady temperature of 25° C., a temperature very favourable to normal development. The results of these experiments showed many successes and many failures, in this respect agreeing with the results of high temperature experiments with fungi. The death rate was high, and of the flies which did survive, many were quite sterile, or only became fertile after a preliminary period of sterility; male sterility was specially prevalent. From the progeny of flies which hatched out, many variants were obtained, including specimens of some rare variants which had been seen only once before by any of the numerous workers on this well investigated insect. The variants included some non-transmissible modifications, and some which could transmit their characters; at times, flies hatched from heated eggs or larvae appeared to be normal, but abnormalities were found in their offspring, an interesting parallel with conditions known to occur in fungi.

H. J. Muller† and his associates have investigated the effects of X-rays on *Drosophila* very thoroughly, obtaining variants in large numbers and great variety. Induced sterility was of widespread occurrence, especially in males. It is well known that *Drosophila*

* Goldschmidt, R., *Biol. Zbl.* XLIX (1929), 437.

† Muller, H. J., *Proc. Nat. Acad. Sci.*, Wash., XIV (1928), 714; *Genetics*, XIII (1928), 279; *Hereditas*, XVI (1932), 160; Muller, H. J. and Altenburg, E., *Proc. Soc. Exp. Biol.*, N.Y., XVII (1919), 10; Muller, H. J. and Mott-Smith, L. M., *Proc. Nat. Acad. Sci.*, Wash., XVI (1930), 277.

varies spontaneously when grown in tubes with pieces of banana as food, but the suspicion arises that some at least of this supposed spontaneous variation may be induced by the crowded conditions, comparable with the methods used by the Chinese in dealing with goldfish. After treatment with X-rays however, the rate of change is increased enormously. Muller noted that the variants found most frequently in his work were like those which had appeared most frequently in the ordinary cultures of other investigators, this suggesting that some characters or groups of characters are more easily changed than others. One notable variant, distinguished by mottling of the eye, was unstable for that character, again furnishing a parallel with phenomena in some fungal variants.

The use of X-rays and high temperatures together further increased the rate of change, though it was clear that X-rays alone were much more effective than increases of temperature alone; there was however no evidence that the kinds of variants were in any way determined by the agent used to provoke their appearance.

Tobacco plants have proved to be very responsive to X-rays, maybe because the cultivated plant is probably a hybrid, and therefore somewhat unsettled in constitution. A strain of tobacco which has been under observation for twenty-five years, and known to be stable in ordinary cultivation, has been investigated by Goodspeed* and his associates. Unopened flower buds were irradiated for about ten minutes and then allowed to develop; seeds from these buds gave rise to many abnormal plants, the variations affecting the stature of the plants, the shape of the leaves, and the colour, size and shape of the flowers. Some plants raised from seeds of treated flowers appeared to be normal, but, after selfing, variants developed in the progeny of these plants, still another example of delayed action. The plants often showed reduction in fertility, being at times quite sterile. Some plants were a mosaic of normal and variant tissue, and these plants may be compared with a sectoring mycelium. Cytological work showed that irradiation of tobacco plants may be followed by great disturbance in the behaviour of the chromosomes in dividing nuclei, and in the general construction of the nucleus.

Much interesting work on induced variation has been done on *Antirrhinum*. Baur started experiments in Germany as far back as 1908, and, in connection with this work, a stock of *Antirrhinum* has been carried on from year to year by selfing. Close observation of that stock has revealed little evidence of spontaneous variation, and it is of interest that the stock seems to have suffered no serious loss of vigour or diminution of fertility during the long period of inbreeding.

Among many experiments in which this stock has been used by

* Goodspeed, T. H., *Bot. Gaz.* LXXXVII (1929), 563; Goodspeed, T. H. and Olson, A. R., *Proc. Nat. Acad. Sci.*, Wash., XIV (1928), 66.

Baur* and his pupils, some experiments on seeds are of special interest. The seeds were soaked for twenty-four hours and then exposed to the emanations of radium. Little effect was produced unless the seeds were treated for at least forty-five minutes. With longer exposures, the seeds suffered loss of power of germination, and those which did germinate often produced short-lived seedlings with deformed cotyledons. Some plants which survived the seedling stage grew more slowly than normal plants, flowered late, and were specially liable to disease; others were abnormal when young, but seemed to become normal as they matured. A general relation appeared to exist between the duration of the exposure to radium and the extent to which the plants subsequently reacted, but the relation was by no means exact. Sterility was very common in plants grown from treated seeds, and even when abnormalities of morphology disappeared as the plants matured, sterility often persisted. Owing to this sterility, the plants were mostly propagated by vegetative means, giving clones which, commonly, retained the peculiarities of the variant from which the cuttings were taken. Anatomical and cytological investigations revealed a number of irregularities suggesting marked disturbance of ordinary development. The development of the pollen was sometimes so far affected that the process did not get beyond the earliest stages, and there were also indications that, after ovules had been laid down, they could then be replaced by ordinary vegetative tissue. However, some germinable seed was set by the variants, and this, on germination, usually gave normal plants of *Antirrhinum*.

Variants of similar character were obtained from another stock of *Antirrhinum*† after the material had been exposed to X-rays, ultraviolet light, high temperatures, and various chemicals. When young flowers were operated on, treatment was most effective if applied at a time when meiosis was probably in progress. None of the agents seemed to exert a specific effect. It is of note that temperatures of 47° C. soon killed active plant material saturated with water, for still another investigation‡ of *Antirrhinum* showed that a few pollen grains could function after they had been heated for three minutes at 116° C., provided that they were heated in a dry state after a thorough preliminary drying for several days in a desiccator. An even more surprising discovery was, that carefully dried pollen, after being heated at 86° C., for two days, was half as effective in bringing about fertilisation as was normal unheated pollen. As a further illustration of

* Baur, E., *Bibl. genet.*, Lpz., IV (1924); *Z. Bot.* XXIII (1930), 676; *J. R. Hort. Soc.* LVI (1931), 176; Stein, E., *Z. indukt. Abstamm.- u. VererbLehre*, XXIX (1922), 1; XLIII (1927), 1; *Biol. Zbl.*, XLVII (1927), 705; L (1930), 129.

† Stubbe, H., *Z. indukt. Abstamm.- u. VererbLehre*, LVI (1930), 1, 202.

‡ Hiorth, G., *Z. indukt. Abstamm.- u. VererbLehre*, LVI (1930), 39.

the power of carefully dried plant material to resist heat, brief mention may be made of the work of Gain,* on the fruits of *Helianthus annuus*. A few of these retained sufficient vitality after fifteen minutes at 150° C. to begin to germinate, and flowering plants were raised from fruits which had been heated to 120° C.; these plants were unable to set seed.

It is however necessary to return to the experiments with *Antirrhinum*. 434 plants were grown from seed fertilised from strongly heated pollen; they included twenty variants, thirteen of these from pollen which had been heated to 100° C., or to higher temperatures. In contrast with these plants, 2771 plants from seeds fertilised by less strongly heated pollen, included only thirty-two variants. Of the fifty-two variants observed in these experiments, thirty-nine formed little or no pollen, and the plants had malformed anthers, various peculiarities of flower structure, and a tendency to develop very narrow leaves, a common character in abnormal plants of *Antirrhinum*.

One further matter claims our attention, that of the influence of the age of reproductive bodies on the progeny developed from them. Gain (*loc. cit.*) found that similar abnormalities could be obtained in *Helianthus annuus* by strongly heating dry embryos, and by allowing embryos to dry and to age for long periods at ordinary temperatures. Still more recently it has been shown† that old fruits of *Crepis tectorum* may give abnormal plants; in one experiment, twenty-two out of twenty-seven plants from old fruits were abnormal. Cytological investigation of the root tips of these plants revealed many abnormalities in the nuclei, and further, the plants were shown to be chimaeras. The fruits used had been stored in the dry for from five to six years. It was then found that fruits of *C. tectorum*, ripened in the previous season and germinated after being heated for some weeks at about 55° C., gave many deformed plants resembling those grown from old fruits. Fruits of the previous season, after they had been heated in the dry for twenty days at 55° C., usually germinated as well as untreated material of the same age, but the seedlings often failed to get beyond the stage of spreading their cotyledons; of the plants that developed further, most were at first abnormal, but some ultimately assumed a normal appearance. Similar fruits gave a germination of over 70 per cent. after heating for forty days, but after forty-four days the germination was only 44 per cent. Seedlings from the more severely heated material never got beyond the cotyledon stage, and died after about a month. Fruits of the previous season, after treatment with X-rays, behaved much like heated fruits, and like old fruits after some years of dry storage; evidently, the diverse treatments were followed by similar response by the plant.

* Gain, E., *Rev. gén. Bot.* XXXIX (1927), 234, 306.

† Navashin, M. and Shkvarnikov, P., *Nature*, Lond., CXXXII (1933), 482.

Cartledge and Blakeslee* have made comparable observations on a stock of *Datura* that had been under investigation for some years; this stock had a tendency to form aborted pollen grains, and, as that character was easily detected, it was used as a convenient means of estimating the rate at which the stock changed under special treatment. Old seeds, stored in the dry for from four to seven years, yielded many more plants with aborted pollen grains than seeds from one to five years old, similarly stored. There were indications that the tendency to produce abortive pollen was inheritable. The distribution on the plants of the flowers in which pollen abortion was or was not marked, indicated that most of the plants were composed partly of normal and partly of altered tissue; that is, the plants were comparable with a sectoring mycelium; few plants consisted wholly of altered tissue.

In *Helianthus*, in *Crepis* and in *Datura*, it seems that, during storage, or under the influence of special treatment, changes occurred in at least some of the cells of the embryo, and that, at any rate in *Crepis* and *Datura*, these changes resulted in the development of plants of heterogeneous composition; this suggestion however still awaits complete demonstration.

Abnormalities in seedlings grown from aged seed bring us back again to the fungi, for changes in pigmentation of the conidia have been recorded† in species of *Aspergillus* grown from old spores. Unusually blue conidia developed on colonies of *A. versicolor* started from conidia two years old, and conidia nine years old, taken from an apparently normal strain of *A. glaucus*, produced colonies with colourless conidia. The nine-year-old spores did not germinate well, and here, presumably, we have an example of variants derived from moribund spores, a circumstance reminiscent of some of the results obtained in experiments with high temperatures.

The foregoing survey is by no means complete, but it is believed to contain a fair selection of the facts at present available. The selection of facts has been made in order to show the kind of evidence that is available, not to support any special point of view, except the underlying idea that it is possible to induce variation by experimental means. Reference has not been made to the extensive literature on induced variation in bacteria and in many of the lower animals, and no attempt has been made to discuss the large volume of work on the extensive variation shown by some fungi under apparently ordinary conditions of culture. It is however by no means impossible that some of this so-called spontaneous variation may be traced ultimately to

* Cartledge, J. L. and Blakeslee, A. F., *Proc. Nat. Acad. Sci.*, Wash., xx (1934), 103.

† Blochwitz, A., *Ber. dtsch. bot. Ges.* xli (1923), 205.

reactions following on the wounding caused by using pieces of hyphae to start new cultures, and some may be due to the use of media which are really unsuitable to the needs of the fungus. It is usual to assume that media which serve the needs of a particular investigation in providing desired stages in the life-history of a fungus are favourable media for the growth of the fungus but it does not follow that the needs of fungus and investigator necessarily coincide. It is well known that many fungi are stable in culture on such media as potato agar and unstable on synthetic media; the latter, convenient as they are, probably lack some constituent necessary to healthy growth, or contain some substance or combination of substances which, while promoting strong growth, also upset the general balance of the developing organism.

It is natural enough to seek for an explanation of the facts, but it is doubtful if we are yet in a position to begin to suggest one; as the phenomena are far from simple, it is probable that they cannot all be brought under one explanation. Yet, as a conclusion to this provisional survey of a wide field, a few general remarks appear to be necessary; they need not be extensive.

There can be no reasonable doubt that stocks of organisms, known to be stable under ordinary treatment, yield, after certain kinds of experiments, forms which have not been noted before in the stock. Since these forms appear only after experimental treatment, it is not easy to avoid the conclusion that they owe their origin to some effect of the treatment. It has been suggested, and there seems to be no decisive argument to negative the suggestion, that the variants are nothing more than forms of the stock, rarely seen under normal treatment, but selected by the conditions of experiment. It is difficult to accept this view, at any rate for the fungi. Some of the variants differ so conspicuously from normal that they could not be overlooked, did they occur at all frequently in ordinary cultures. The spores of some variants germinate as readily as the ordinary spores, they need no special treatment to cause them to germinate, and the variant colonies do not demand special treatment for their healthy growth. In mixed culture, normals and variants grow side by side and retain their characters, so that they can be distinguished with the utmost ease even in dry cultures which are months or years old. Such variants could hardly escape observation over a period of years if they were normal, though occasional products of a normal strain of fungus. The idea that the variants are selected by the treatment becomes almost absurd when it is recalled how freely variants appeared in *Chaetomium* after treatment with X-rays.

Certain features come out again and again in the results of work on induced variation, and, so far as the peculiarities of their organisation allow, the fungi fit well into the general scheme. Two outstanding

features are, a common but by no means universal reduction in fertility, and a frequent but not invariable weakness in growth; such features suggest that the variants are damaged versions of the normal stocks from which they have sprung. This interpretation is well supported by the abundant evidence that the induction of a variant is often followed by a period of adjustment, a period not always ending in the same way. Sometimes the adjustment cannot be made, and the organism dies, maybe as a sporeling, maybe after it has passed through several transfers: the damage has been so severe that it cannot be repaired. Sometimes adjustment is so complete that the normal form is regained, either in the first culture or after a period of growth: the disturbance has been transitory. Sometimes there is an intermediate condition, and adjustment leads to the establishment of a permanent variant: the damage has caused a shift in the general balance within the organism.

The nature of the change remains obscure. Much time could be spent in speculations about gene changes and alterations in the chromosomes. Such changes may, and probably do occur. It seems highly probable that some nuclear change, and some mixing of nuclei of different qualities must be concerned in a sectoring mycelium, and in induced chimaeras in higher plants. But, until we have more definite evidence it is unwise to attribute everything to nuclear changes; the similar effects which follow heat treatment and age for example, suggest that a general derangement of the physiological balance of the cell may well be responsible. The likeness that seems to exist between the effects on cells of violent external treatment and of the slow changes which must proceed in resting spores and seeds, is perhaps the most interesting feature of work on induced variation; the violent external agents may well hasten the normal changes of a degenerative nature which presumably assist in bringing about the death of a spore or seed unable for some reason to germinate. We have at least a glimpse of a possibility that some new forms may arise from aged material and establish themselves. If this be so, the evolutionary process may depend in part on the running down of the biological machine.

COOKE'S *ILLUSTRATIONS OF BRITISH FUNGI*

The eight volumes of Cooke's *Illustrations of British Fungi* are much prized, but referred to with increasing doubt as a wider knowledge of agaric species is obtained. The fact is that a large proportion of the plates are wrongly or doubtfully named. For the most part the figures are well done; there are of course some poor figures, but the whole forms a very valuable series, perhaps the finest set of illustrations of agarics in existence. Many modern reproductions are superior, but are scattered in various publications not easily acquired.

In the *Transactions* of this Society there have been two lists of criticisms of the Cooke plates. C. B. Plowright (*Trans. Brit. mycol. Soc.* I (1898), 39–40) made a few comments in his presidential address, but suggested only a few changes in the names given by Cooke. Émile Boudier (II (1906), 150–7) made some rectifications and observations which were very illuminating. Cooke (III (1907), 26–9) replied, agreeing to some of the determinations but vigorously disputing others. Since then there have been numerous citations that sometimes have referred to species other than what Cooke named them, but there has been no paper covering all the plates.

By a fortunate chance my friend, M. Joachim, a past President of the Société Mycologique de France, showed me the copy of a manuscript which had been written by Lucien Quélet. It bore the title "Annotations d'après le Dr Quélet des planches de l'ouvrage: Handbook of British Fungi by M. C. Cooke, second and revised edition. London 1883". The title is erroneous, as the annotations were not of Cooke's Handbook, but of the *Illustrations of British Fungi* (1881–91). The manuscript contains Quélet's views of all the plates. Where he makes no comment, it is to be presumed that he agrees with the name printed on the plate.

The manuscript appeared to be of so much interest that I asked M. Joachim for permission to have it reproduced in these *Transactions*.

It then occurred to me that the work could be made much more useful if supplemented with a review of Cooke's *Illustrations* by modern mycologists well qualified to undertake this task, and I therefore referred to the two eminent authorities, Prof. Dr René Maire and Mr Carleton Rea. They both very kindly agreed to annotate the plates, and the result is here given in tabular form. In frequent cases there will be found a conflict of opinion. This was inevitable. Even with the living fungus, eminent mycologists do not always agree. How much more must this occur with an illustration which may be an imperfect representation of the original? The true identity of many of the agarics figured by Cooke can never be known with certainty.

Dr Maire, in his manuscript, used many of the new generic names which are now generally adopted by French mycologists. These, however, are not printed, as the purpose of the annotations is sufficiently served by using the specific epithets only, except where clearness requires the genus to be shown.

In the columns under both Maire and Rea, a dash does not indicate agreement as in the Quélet column, but means that no opinion is ventured.

The annotations could have been made more complete by including the many citations from monographs, etc., that have appeared in recent years. Doubtless this would have added interest and would have revealed further differences of opinion. I doubt, however, whether it would have added to the practical value of the paper. All will continue to have their own views about some of the plates, but the new light that is now thrown upon Cooke's *Illustrations of British Fungi* will be welcomed by students of the agarics everywhere.

The species have been listed in the rotation of the bound volumes as finally issued. This does not correspond with the numbering on the plates. There are many volumes scattered about the world which have been bound differently, so an index to the plate numbers has been added which will give further value to the present paper.

A. A. PEARSON.

COOKE'S *ILLUSTRATIONS OF BRITISH FUNGI*

No. of bound volume	No. printed on Plate	Cooke			Quélet
1	1	*Agaricus*	(*Amanita*)	*virosus*	*solitaria*
2	2	—	—	*phalloides*	ou *junquillea*
3	3	—	—	*vernus*	ou *citrina* var. *albata*
4	4	—	—	*mappa*	—
5	117	—	—	*muscarius*	—
6	6	—	—	*pantherinus*	?
7	7	—	—	*excelsus*	*virescens* (excepté le bulbe)
8	8	—	—	*strobiliformis*	non! inconnu—*rubens* (?)
9	277	—	—	*strobiliformis*	ou *solitaria*
10	9	—	—	*rubescens*	—
11	69	—	—	*spissus*	?
12	70	—	—	*nitidus*	*aspera* var. *pallescens*
13	10	—	—	*asper*	?
14	34	—	—	*magnificus*	—
15	11	—	—	*megalodactylus*	*Lepiota guttata* (?)
16	12	—	—	*vaginatus*	—
17	13	—	—	*strangulatus*	malé
18	35	—	—	*adnatus*	(?) *junquillea* vetustior ou *aspera* pallescens
19	21	—	(*Lepiota*)	*procerus*	trop petit...*mastoidea*
20	22	—	—	*rhacodes*	—
21	23	—	—	*excoriatus*	—
22	28	—	—	*gracilentus*	—
23	24	—	—	*mastoideus*	représente mieux *cristata*
24	14	—	—	*acutesquamosus*	—
25	25	—	—	*Badhami*	—
26	26	—	—	*meleagris*	—
27	37	—	—	*biornatus*	—
28	27	—	—	*hispidus*	non!
29	38	—	—	*clypeolarius*	?
30	39	—	—	*metulaesporus*	*clypeolaria*, gracilis avec état maladif des lamelles
31	29	—	—	*cristatus*	?
32	40	—	—	*ermineus*	—
33	36	—	—	*Vittadini*	—
34	41	—	—	*holosericeus*	ou plutôt *guttata* (?)
35	15	—	—	*naucinus*	—
36	5	—	—	*cepaestipes*	*lutea* et *cepaestipes*
37	42	—	—	*carcharias*	—
38	43	—	—	*cinnabarinus*	—
39	18	—	—	*granulosus*	—
40	213	—	—	*granulosus* var. *rufescens*	—
		—	—	*amianthinus*	—

Maire	Rea	No. of bound volume	No. printed on Plate
virosa, mais très robuste	typical *verna* (syn. *virosa*)	1	1
citrina, mais à marge de la volve plus développée que d'habitude, lamellules inexactes	*phalloides*, with typical free-lobed volva	2	2
citrina var. *alba*	*mappa* var. *alba* Gill.	3	3
citrina var. *alba*	*mappa* (syn. *citrina*)	4	4
muscaria	*muscaria*	5	117
plutôt forme de *spissa*	*pantherina*. It has the striate margin and concentric rings to apex of volva	6	6
forme de *spissa*, teinte trop verte	*excelsa*	7	7
peut-être *A. Emilii* Riel	—	8	8
solitaria	*strobiliformis* typical	9	277
rubescens	*rubescens*	10	9
spissa mais atypique. La figure du haut rappelle plutôt *aspera*	*spissa* poor	11	69
(?) mauvaise figure de *echinocephala*	—	12	70
aspera (forme à verrues grisâtres)	—	13	10
anomalie de *rubescens*	*rubescens* poor	14	34
lenticularis var. *eguttata*	*lenticularis* poor	15	11
vaginata	*vaginata*	16	12
inaurata	*strangulata* (syn. *inaurata*)	17	13
Amanita gemmata Fr. (=*junquillea* Q.)	*adnata* (syn. *junquillea* and *gemmata*)	18	35
procera, petite forme	*procera*	19	21
rhacodes	*rhacodes*	20	22
excoriata	*excoriata*	21	23
gracilenta?	not *gracilenta*, does not show minute scales on stem	22	28
trop petit et trop mince, peut-être *L. cepaestipes* var. *nigricans* Bagl.	not *mastoidea*, does not show excoriated margin or scales on stem	23	24
acutesquamosa	*acutesquamosa*, large form	24	14
Badhami (spores, données d'après Massee, trop petites)	*Badhami* typical	25	25
meleagris	*meleagris*	26	26
très voisin d'un *Lepiota* fréquent à Alger, mais dont la chair ne rougit pas	*biornatus*	27	37
forme de *clypeolaria*	*clypeolaria* type	28	27
Do.	*clypeolariodes* Rea	29	38
Do.	*clypeolaria*	30	39
cristata probablement	*cristata*	31	29
erminea	*erminea*	32	40
Vittadinii	*Vittadinii*, but should give gills finally greenish	33	36
?	*holosericea*	34	41
naucina	*naucina*, hot bed form	35	15
lutea	*lutea*	36	5
cepaestipes	*cepaestipes*		
carcharias	*carcharias*	37	42
cinnabarina	*cinnabarina*	38	43
granulosa	*granulosa*	39	18
carcharias	*carcharias*		
?	*granulosa* var. *rufescens*	40	213
amianthina	*amianthina*		

No. of bound volume	No. printed on Plate	Cooke			Quélet
41	30	*Agaricus*	(*Lepiota*)	*polystictus*	*Armill. rufa*, gracilis ? *Arm. luteo-vireus*, gracilis ?
42	85	—	—	*sistratus*	—
		—	—	*mesomorphus*	
43	19	—	—	*seminudus*	et var. *lilacina* Quél.
		—	—	*Bucknalli*	
44	44	—	—	*medullatus*	copié
45	118	—	—	*gliodermus*	
		—	—	*delicatus*	?
46	17	—	—	*lenticularis*	—
47	132	—	—	*Georginae*	*haematosperma*, forme très grêle
48	20	—	(*Armillaria*)	*bulbiger*	—
49	245	—	—	*focalis*	—
50	31	—	—	— var. *Goliath*	—
51	33	—	—	*aurantius*	?
52	86	—	—	*robustus* var. *minor*	*subannulata* Batsch
53	71	—	—	*ramentaceus*	—
54	45	—	—	*haematites*	*carcharias*, forme malade
55	46	—	—	*constrictus*	*holosericea*
56	32	—	—	*melleus*	—
57	47	—	—	*subcavus*	*cepaestipes* ou *serena*
58	16	—	—	*mucidus*	—
59	72	—	(*Tricholoma*)	*equestris*	—
60	53	—	—	*sejunctus*	malè
61	54	—	—	*portentosus*	*Coll. grammocephala* Bull.
62	73	—	—	*fucatus*	?
63	74	—	—	*quinquepartitus*	—
64	55	—	—	*resplendens*	le violet rappelle plutôt *columbetta*
65	87	—	—	*spermaticus*	*columbetta*, vetusta
66	75	—	—	*colossus*	—
67	76	—	—	*acerbus*	malè
68	56	—	—	*nictitans*	*fulvum*
69	57	—	—	*fulvellus*	*fulvum* ou *ustale* grêle
70	58	—	—	*flavo-brunneus*	malè
71	197	—	—	*albo-brunneus*	—
72	88	—	—	*ustalis*	—
73	198	—	—	*stans*	*striatum*
74	89	—	—	*rutilans*	—
75	214	—	—	*luridus*	?
76	59	—	—	*guttatus*	rappelle *Coll. maculata*
77	48	—	—	*columbetta*	—
78	215	—	—	*scalpturatus*	*luridum*
79	199	—	—	*imbricatus*	—
80	60	—	—	*imbricatus*	—
81	61	—	—	*immundus*	—
82	49	—	—	*murinaceus*	—
83	50	—	—	*terreus*	*hordum*
84	165	—	—	— var. *argyraceus*	—
85	51	—	—	*atrosquamus*	*orirubens* ou *argyraceum*
86	90	—	—	*ori-rubens*	malè

Maire	Rea	No. of bound volume	No. printed on Plate
?	*polysticta*	41	30
—	*sistrata*	42	85
—	?		
seminuda	*seminuda*	43	19
Bucknallii, mauvaise figure	I doubt *Bucknallii* though I know it well		
—	looks like Fries Icones figure	44	44
glioderma	*glioderma*	45	118
—	—		
lenticularis	*lenticularis*	46	17
Georginae	*Georginae*	47	132
bulbiger	*bulbigera*	48	20
—	—	49	245
—	—	50	31
robusta	*robusta*	51	33
—	—	52	86
ramentacea	*ramentacea*	53	71
haematites	like the original painting of *haematites*	54	45
constricta	*constricta* typical	55	46
mellea	*mellea*	56	32
Lepiota Brebissoni Godey ou *Magnusiana* P. Henn., Maire	—	57	47
mucida	*mucida*	58	16
trop pâle	*equestre*	59	72
Tr. sejunctum, mauvaise figure	possibly *sejunctum* but not typical	60	53
Coll. platyphylla	*platyphylla*	61	54
?	—	62	73
?	—	63	74
?	*resplendens*, the pileus is viscid	64	55
?	*spermaticum*, sp. verrucose	65	87
Tr. colossus	—	66	75
suffocatum	*acerbum*, but too deep in colour	67	76
flavobrunneum	—	68	56
?	—	69	57
pessundatum, mauvaise figure	possibly *pessundatum*	70	58
albobrunneum, mauvaise figure	*albobrunneum* typical	71	197
ustale	*ustale*	72	88
albobrunneum ? malé	*stans*	73	198
rutilans	*rutilans*	74	89
?	*luridum* poor	75	214
orirubens ? ou forme voisine	*guttatum* (Schaeff.) Rea	76	59
columbetta	*columbetta*	77	48
? *atrosquamosum*, mauvaise figure	certainly not *scalpturatum*	78	215
imbricatum	*imbricatum* poor	79	199
vaccinum	*vaccinum* typical	80	60
T. immundum=*T. fumosum* Pers. non Fr.	*Collybia fumosa* Pers.	81	61
murinaceum Fr. non Quél., mauvaise figure	*murinaceum* typical	82	49
?	a form of *terreum*	83	50
scalpturatum=*argyraceum*	*argyraceum* typical	84	165
atrosquamosum ?	*terreum* var. *atrosquamosum*	85	51
orirubens	*orirubens* (? diseased form of *terreum*)	86	90

No. of bound volume	No. printed on Plate	Cooke			Quélet
87	278	*Agaricus* (*Tricholoma*) *macrorhizus*			—
88	91	—	—	*saponaceus*	malè
89	216	—	—	id. var. *stipite-squamuloso*	—
90	166	—	—	*cartilagineus*	*triste*
91	52	—	—	*atrocinereus*	—
		—	—	*cuneifolius*	
92	261	—	—	*cuneifolius* var. *cinereo-rimosus*	? forme de *Russula lilacea*
93	92	—	—	*crassifolius*	*Georgii*
94	93	—	—	*tumidus*	*hordum* ?
95	167	—	—	*virgatus*	—
96	62	—	—	*sulphureus*	—
97	181	—	—	*bufonius*	—
98	94	—	—	*lascivus*	*album*, gracile?
99	217	—	—	id. var. *robustus*	*Omphalia gilva*
100	77	—	—	*inamaenus*	copié de Fries
101	95	—	—	*ionides*	malè
		—	—	*cerinus*	*Marasmius Oreades*
102	96	—	—	*carneus* }	mal copiés
		—	—	*coelatus* }	
103	63	—	—	*gambosus*	*Clitocybe geotropa*
104	262	—	—	*amethystinus*	non ! *luridum* ?
105	229	—	—	*albellus*	*Georgii*, malè
106	64	—	—	*tigrinus*	non ! copié de Fries
107	168	—	—	*Schumacheri*	forme de *nebularis*
108	279	—	—	*patulus*	—
109	218	—	—	*arcuatus*	—
		—	—	*oreinus*	? malè
110	65	—	—	*albus*	non ! *Cort. sebaceus* ?
111	78	—	—	*leucocephalus*	—
112	169	—	—	*militaris*	quelque chose de *acerbum*
113	66	—	—	*personatus*	malè
114	67	—	—	*nudus*	malè ?
115	133	—	—	id. var. *major*	malè
116	170	—	—	*cinerascens*	malè
117	97	—	—	*panaeolus*	—
118	98	—	—	*grammopodius*	—
119	119	—	—	*melaleucus* et var. *porphyroleucus*	—
120	68	—	—	*brevipes*	?
121	99	—	—	*humilis*	*humile* ? *sordidum*
122	263	—	—	*humilis*	malè
123	171	—	—	*exscissus*	—
124	219	—	—	*subpulverulentus*	—
125	100	—	—	*sordidus*	malè
126	120	—	—	*paedidus*	—
		—	—	*lixivius*	ou *melaleucum*
127	172	—	—	*putidus*	malè
128	79	—	(*Clitocybe*)	*nebularis*	—
129	80	—	—	*clavipes*	—
130	246	—	—	*inornatus*	—
		—	—	*hirnaeolus*	? *leucophylla*
131	264	—	—	*cyanophaeus*	forme de *sordidum*
132	134	—	—	*amarus*	—
		—	—	*socialis*	*flaccida*

Maire	Rea	No. of bound volume	No. printed on Plate
?	—	87	278
saponaceum, mauvaise figure	*saponaceum*	88	91
saponaceum var.	id. var. *stipite-squamuloso*	89	216
terreum	a form of *terreum*	90	166
atrocinereum	*atrocinereum*	91	52
cuneifolium	*cuneifolium*		
cuneifolium forma	var. *cinereo-rimosum*	92	261
Georgii forma ?	not *crassifolium* of my work	93	92
?	—	94	93
virgatum	*virgatum*	95	167
sulphureum	*sulphureum*	96	62
id. var. *bufonium*	*bufonium*	97	181
? trop grêle	—	98	94
Clitocybe Alexandri Fr.= *C. gilva* Quél. non Fr.	—	99	217
inamaenum	*inamaenum*	100	77
ionides	*ionides*	101	95
?	not *cerinus*		
carneum	*carneum* typical	102	96
caelatum	*caelatum* typical		
?	*gambosum*	103	63
?	—	104	262
Georgii, trop jaune	—	105	229
inspiré de Fries	—	106	64
Clitocybe nebularis	—	107	168
?	not *patulum*	108	279
forme de *brevipes*	*brevipes*	109	218
graminicola (Velen.)	—		
beaucoup trop jaune. *Clitocybe* ?	*album*, extreme form	110	65
—	*leucocephalum*	111	78
—	*militare*	112	169
saevum (=*personatum* var. *anserinum* Fr.)	*personatum* type	113	66
do.	*saevum*	114	67
do.	*personatum*	115	133
?	*cinerascens* poor	116	170
Panaeolus	*panaeolus*	117	97
grammopodium	*turritum*	118	98
melaleucum	*melaleucum*	119	119
	id. var. *porphyroleucum*		
brevipes	*brevipes*	120	68
melaleucum var. *phaeopodium*	—	121	99
sordidum, mais lamelles trop pâles	*sordidum*		
? ?	*humile*	122	263
melaleucum var. *excissum*, pâle	*melaleucum*		
melaleucum var. *excissum* ?	*excissum* poor	123	171
—	*subpulverulentum*	124	219
sordidum, mauvaise figure	*sordidum*	125	100
—	—	126	120
—	—		
?	—	127	172
nebularis	*nebularis*	128	79
clavipes	*clavipes* poor	129	80
inornata	*inornata*	130	246
? ?	—		
Panus torulosus jeune ?	—	131	264
amara, trop jaune	*amara*	132	134
?	—		

No. of bound volume	No. printed on Plate	Cooke			Quélet
133	265	*Agaricus*	(*Clitocybe*)	*venustissimus*	copiés
134	101	—	—	*odorus*	—
135	102	—	—	*trogii*	forme de *viridis* décoloré
136	200	—	—	*rivulosus*	*ventosa*
		—	—	id. var. *neptuneus*	absolument faux! ? *pyxidata*
137	121	—	—	*cerussatus*	—
138	122	—	—	id. var *difformis*	—
139	81	—	—	*phyllophilus*	—
140	103	—	—	*pithyophilus*	—
		—	—	*tornatus*	—
141	82	—	—	*candicans*	*phyllophila*
142	104	—	—	*dealbatus*	*cerussata*
143	173	—	—	id. var. *minor*	—
144	174	—	—	*gallinaceus*	*phyllophila*
145	182	—	—	*aggregatus*	—
146	280	—	—	*elixus*	*gilva* Pers.?
147	175	—	—	*fumosus*	—
148	105	—	—	*tumulosus*	—
149	176	—	—	*opacus*	?
150	106	—	—	*giganteus*	—
151	135	—	—	*maximus*	*geotropa*
152	107	—	—	*infundibuliformis*	—
153	281	—	—	*incilis*	?
		—	—	*parilis*	trop jaune
154	83	—	—	*geotropus*	—
155	177	—	—	id. var. *subinvolutus*	—
156	108	—	—	*subinvolutus*	*geotropa*
157	136	—	—	*gilvus*	—
158	109	—	—	*splendens*	—
159	84	—	—	*flaccidus*	—
160	123	—	—	*flaccidus*	—
161	137	—	—	*lobatus*	—
162	110	—	—	*senilis*	—
163	111	—	—	*catinus*	—
164	112	—	—	*tuba*	—
165	138	—	—	*ericetorum*	—
166	113	—	—	*cyathiformis*	—
167	220	—	—	*expallens*	*cyathiformis*
168	230	—	—	*obbatus*	*expallens?*
169	231	—	—	*pruinosus*	*squamulosa*
170	114	—	—	*brumalis*	—
171	115	—	—	*metachrous*	—
172	116	—	—	*ditopus*	—
173	232	—	—	*diatretus*	?
174	124	—	—	*fragrans*	—
175	125	—	—	*angustissimus*	—
176	233	—	—	*obsoletus*	*dealbata*
177	126	—	—	*ectypus*	—
178	183	—	—	*bellus*	—
179	139	—	—	*laccatus*	*Collybia*
180	127	—	—	*Sadleri*	—
181	140	—	(*Collybia*)	*radicatus*	—
182	201	—	—	*longipes*	—
183	128	—	—	*platyphyllus*	—

Maire	Rea	No. of bound volume	No. printed on Plate
Pleurotus olearius?	—	133	265
venustissima	*venustissima*		
odora, mauvaise figure	*odora* poor	134	101
odora var. *Trogii*	*viridis*	135	102
rivulosa?, mauvaise figure	not *rivulosa*	136	200
Omphalia pyxidata	—		
cerussata	*cerussata*	137	121
—	—	138	122
phyllophila	*phyllophila*	139	81
gallinacea	—	140	103
tornata	*tornata*		
gallinacea?	*phyllophila*	141	82
ressemble un peu à *connata*	*cerussata* not typical	142	104
?	*dealbata* var. *minor*	143	173
gallinacea	*gallinacea*	144	174
aggregata	*aggregata*	145	182
inornata	*inornata*	146	280
Col. fumosa Fr. non Quél. nec Bres.	*Tr. cinerascens*	147	175
tumulosa	*tumulosa*	148	105
—	—	149	176
gigantea	*gigantea*	150	106
geotropa forma *maxima*	*maxima*	151	135
infundibuliformis	*infundibuliformis*	152	107
—	*incilis* poor, margin should be crenate	153	281
parilis	*parilis* typical		
geotropa	*geotropa*	154	83
geotropa, mais spores inexactes	*subinvoluta*	155	177
geotropa	—	156	108
infundibuliformis forma *gibba* Fr. Mon. p. 119	*infundibuliformis*	157	136
splendens	*splendens* small form	158	109
inversa	*inversa*	159	84
inversa (*C. flaccida*, insuffisamment distinct d'*inversa*)	*flaccida*	160	123
inversa	*lobata*	161	137
?	*viridis*	162	110
catinus, trop blanc	*catinus*	163	111
tuba	*tuba*	164	112
ericetorum? ou *Hygrophorus niveus*?	*ericetorum*	165	138
cyathiformis	*cyathiformis*, but does not show reticulate stem	166	113
cyathiformis, forme grêle?	*expallens*	167	220
?	—	168	230
?	*cyathiformis* var., stem is right	169	231
brumalis	*brumalis*, but does not show the finally yellowish gill	170	114
metachroa	*metachroa* small form	171	115
ditopa	*ditopa*	172	116
diatreta	*diatreta*	173	232
fragrans	*fragrans*	174	124
angustissima	*angustissima*	175	125
?	—	176	233
cyathiformis	*cyathiformis*	177	126
—	—	178	183
Laccaria laccata et var. *amethystina*	*laccata* and var. *amethystina*	179	139
fasciculare, forme stérile	*fasciculare*	180	127
radicata	*radicata*	181	140
longipes	*longipes*	182	201
platyphylla	*platyphylla*	183	128

No. of bound volume	No. printed on Plate	Cooke	Quélet
184	292	*Agaricus (Collybia) semitalis*	—
185	141	— — *fusipes*	—
186	142	— — *maculatus*	—
187	221	— — var. *immaculatus*	—
188	282	— — *distortus*	—
189	143	— — *butyraceus*	—
190	202	— — *xylophilus*	—
191	184	— — *velutipes*	—
		— — *laxipes*	
192	129	— — *mimicus*	*dryophila*
193	149	— — *vertirugis*	—
		— — *stipitarius*	
194	150	— — *hariolorum*	—
		— — *confluens*	
195	283	— — *ingratus*	—
196	130	— — *conigenus*	—
197	144	— — *tuberosus*	—
		— — *cirrhatus*	
198	205	— — *collinus*	malè
199	145	— — *ventricosus*	—
		— — *Stevensoni*	
200	266	— — *psathyroïdes*	forme de *Mycena nivea*
201	203	— — *xanthopus*	*dryophila*
202	146	— — *nitellinus*	*extuberans*
203	151	— — *succineus*	non ?
		— — *nummularius*	*aquosa*
204	152	— — *esculentus*	—
		— — *tenacellus*	—
205	267	— — *acervatus*	malè
206	204	— — *dryophilus*	—
207	234	— — *aquosus*	? *dryophila*
208	268	— — *exsculptus*	—
		— — *macilentus*	*dryophila*
209	147	— — *clavus*	*Mycena acicularis*
		— — *ocellatus*	*Mycena flavo-alba*
		— — *muscigenus*	*Mycena lactea*
210	153	— — *rancidus*	—
		— — *coracinus*	—
211	154	— — *inolens*	—
		— — *plexipes*	*rancida*
212	155	— — *atratus*	—
		— — *ambustus*	—
213	269	— — *laceratus*	*Hygrophorus distortus*
214	270	— — *protractus*	—
		— — *tesquorum*	—
215	247	— — *tylicolor*	—
		— — *clusilis*	—
216	156	— (*Mycena*) *pelianthinus*	malè
		— — *balaninus*	—
217	284	— — *elegans*	—
		— — *rubro-marginatus*	—
218	131	— — *strobilinus*	*coccinea*
		— — — var. *coccineus*	—
		— — *rosellus*	—
219	157	— — *purus*	—
220	158	— — *pseudopurus*	*pura*
		— — *zephirus*	—

Maire	Rea	No. of bound volume	No. printed on Plate
semitalis	*semitalis*	184	292
fusipes	*fusipes*	185	141
maculata	*maculata*	186	142
?	*maculata* var. *immaculata*	187	221
distorta	*distorta*	188	282
butyracea	*butyracea*	189	143
?	—	190	202
velutipes	*velutipes*	191	184
?	*laxipes*		
—	*mimica*	192	129
Marasmius undatus	*undatus*	193	149
Crinipellis stipitarius	*stipitarius*		
—	both *hariolorum*	194	150
confluens	—		
acervata vieux	*acervata*	195	283
conigena	*conigena*	196	130
tuberosa	both *tuberosa*	197	144
cirrhata Cke. non Schum. = *C. cirrhata* var. *Cookei* Bres.	—		
—	—	198	205
radicata forma	—	199	145
—	—		
Mycena sp.	—	200	266
dryophila	*xanthopus*	201	203
extuberans ? certe non *nitellina*	*extuberans*	202	146
?	*succinea* rather too dark	203	151
dryophila forma *aquosa*	*nummularius*		
clavus (sensu Quélet)	*esculentus*	204	152
clavus (sensu Quélet)	*esculentus*		
acervata	*acervata*	205	267
dryophila	*dryophila*	206	204
dryophila forma *aquosa*	*dryophila* var. *aquosa*	207	234
dryophila var. *funicularis*	—	208	268
dryophila var. *funicularis*	*dryophila* var. *funicularis*		
Mycena acicula	*Mycena clavus*	209	147
Collybia cirrhata	*ocellata*		
Mycena lactea	*muscigena*		
rancida	*rancida*	210	153
coracina	*coracina*		
inolens ?	*inolens*	211	154
rancida ? ? (lui ressemble mais dit inodore)	*plexipes*		
atrata	*atrata*	212	155
ambusta	*ambusta*		
lacerata?	not *lacerata*	213	269
—	*protracta*	214	270
—	*tesquorum*		
—	*tylicolor*, the stem is white pruinose	215	247
clusilis	*clusilis* typical		
pelianthina ?	*pelianthina*	216	156
Marasmius cohaerens	*balanina* ? = *atro-marginata*		
Langei ?	?	217	284
rubromarginata	*rubromarginata*		
strobilina	*strobilina*	218	131
coccinea	*coccinea*		
rosella	*rosella*		
pura	*pura*	219	157
pura forma	*pura*	220	158
zephirus	*zephirus*		

No. of bound volume	No. printed on Plate	Cooke			Quélet
221	185	*Agaricus*	(*Mycena*)	*Adonis*	*floridula*
		—	—	*lineatus*	—
222	159	—	—	*luteo-albus*	—
		—	—	*flavo-albus*	—
		—	—	*lacteus*	—
223	235	—	—	*proliferus*	trop jaune
224	148	—	—	*excisus*	—
225	186	—	—	*psammicola*	*filopes* ou *debilis*?
		—	—	*rugosus*	*ammoniaca*
226	206	—	—	*sudorus*	*galericulata* f. *alba*
227	222	—	—	*galericulatus*	—
		—	—	— terrestrial var.	—
228	223	—	—	var. *calopus*	—
		—	—	*polygrammus*	—
229	224	—	—	*parabolicus*	—
		—	—	*tintinabulum*	—
230	285	—	—	*dissiliens*	—
		—	—	*plicosus*	—
231	236	—	—	*pauperculus*	*cyanorhiza*?
		—	—	*atro-cyaneus*	—
232	237	—	—	*pullatus*	*galopus*
233	187	—	—	*leptocephalus*	—
		—	—	*alcalinus*	*ammoniaca*
234	225	—	—	*alcalinus*	—
235	238	—	—	*ammoniacus*	—
		—	—	*metatus*	—
236	188	—	—	*aetites*	malè, trop jaune
		—	—	*stanneus*	*collariata*
237	160	—	—	*vitreus*	? malè
		—	—	*tenuis*	—
238	161	—	—	*filopes*	—
		—	—	*Iris*	—
239	286	—	—	*amictus*	—
240	189	—	—	*debilis*	*luteoalba*
		—	—	*vitilis*	—
		—	—	*collariatus*	non. *lineata*?
241	190	—	—	*speireus*	malè, pas jaune
		—	—	*tenellus*	*Omphalia stellata*?
		—	—	*acicula*	malè, pas rosé
242	162	—	—	*haematopus*	—
		—	—	*cruentus*	—
243	163	—	—	*sanguinolentus*	—
		—	—	*crocatus*	—
244	207	—	—	*chelidonius*	—
		—	—	*galopus*	—
245	208	—	—	*epipterygius*	—
		—	—	*clavicularis*	—
246	191	—	—	*pelliculosus*	—
		—	—	*vulgaris*	*rorida*
247	248	—	—	*citrinellus*	—
		—	—	*plicato-crenatus*	—
		—	—	*roridus*	—
248	249	—	—	*stylobates*	—
		—	—	*tenerrimus*	—
		—	—	*electicus*	—
249	192	—	—	*sacchariferus*	—
		—	—	*discopus*	—
		—	—	*pterigenus*	—

Maire	Rea	No. of bound volume	No. printed on Plate
Adonis	*Adonis*	221	185
lineata	*lineata*		
flavo-alba?	*luteo-alba*	222	159
flavo-alba?	*flavo-alba*		
lactea var. *pitya*	*lactea*		
—	*prolifera*	223	235
galericulata vieux?	*Berkeleyi*, but unknown to me	224	148
debilis?	—	225	186
rugosa	*rugosa*		
galericulata forma *alba*	*sudora* (viscid on pileus)	226	206
galericulata	*galericulata*	227	222
?	*galericulata*		
inclinata (sensu Quélet)	*galericulata* var. *calopus*	228	223
polygramma	*polygramma*		
—	—	229	224
—	—		
—	*dissiliens*	230	285
—	*plicosa*		
?	—	231	236
atro-cyanea	*atrocyanea*		
—	*pullata*	232	237
alcalina?	—	233	187
ammoniaca	—		
inclinata en haut	*inclinata* typical	234	225
inclinata en bas ou forme de *galericulata*	*alcalina*		
ammoniaca?	*ammoniaca*	235	238
metata	*metata*		
certe non *aetites*	not *aetites*	236	188
?	—		
—	—	237	160
—	—		
filipes?	*filopes*	238	161
Iris	*Iris*		
amicta?	*amicta*, quite distinct from *Iris*	239	286
luteo-alba	—	240	189
vitilis?	*vitilis*		
?	—		
Omphalia tenuistipes?	—	241	190
Omphalia mauretanica Maire?	*tenella*		
acicula, mauvaise figure	*acicula*		
haematopoda	*haematopus* (stem should be darker)	242	162
cruenta	*cruenta*		
sanguinolenta, couleurs trop vives	*sanguinolenta*	243	163
crocata	—		
—	—	244	207
galopoda	*galopus*		
epipterygia	*epipterygia*	245	208
—	—		
?	*pelliculosa* typical	246	191
rorida	*vulgaris*		
—	—	247	248
—	*plicato-crenata*		
rorida	*rorida*		
stylobates	*stylobates*	248	249
tenerrima	*tenerrima*		
Omphalia electica	—		
—	—	249	192
—	*discopus* typical		
—	*pterygena* typical		

No. of bound volume	No. printed on Plate	Cooke	Quélet
250	164	*Agaricus* (*Mycena*) *corticola*	—
		— — *hiemalis*	—
251	193	— — *setosus*	—
		— — *capillaris*	—
		— — *juncicola*	—
252	239	— (*Omphalia*) *hydrogrammus*	—
253	287	— — *maurus*	non verdâtre
		— — *offuciatus*	—
254	194	— — *Postii*	—
		— — *pyxidatus*	—
255	288	— — *leucophyllus*	—
		— — *striaepileus*	—
256	240	— — *telmatiaeus*	—
257	289	— — *sphagnicola*	—
		— — *philonotis*	*leucophylla*
258	209	— — *oniscus*	—
		— — *caespitosus*	*umbellifera* var. *flava*
259	250	— — *demissus*	—
		— — *hepaticus*	—
		— — *muralis*	*pyxidata*, malè
260	271	— — *umbelliferus*	—
261	272	— — *buccinalis*	—
		— — *retostus*	cendré
		— — *abhorrens*	—
262	241	— — *pseudo-androsaceus*	—
		— — *griseo-pallidus*	—
		— — *stellatus*	—
263	273	— — *campanella*	—
		— — — var. *badipus*	—
		— — *pictus*	—
264	210	— — *camptophyllus*	—
		— — *griseus*	—
265	274	— — *umbratilis*	—
		— — *fibula*	—
266	251	— — *directus*	—
		— — *belliae*	*rorida* (vetustior)
267	252	— — *gracillimus*	*stellata* ou *integrella*
		— — *bullula*	*M. Micheliana*
		— — *integrellus*	—
268	290	— (*Pleurotus*) *corticatus*	*dryinus*
269	226	— — *dryinus*	—
270	253	— — *spongiosus*	*ostreatus* var. *columbinus*
271	227	— — *ulmarius*	—
272	254	— — *tessulatus*	—
273	255	— — *subpalmatus*	—
274	256	— — *craspedius*	*ulmarius*
275	178	— — *fimbriatus*	*palmatus*
		— — *Ruthae*	—
276	257	— — *lignatilis*	—
		— — *circinatus*	—
277	179	— — *pantoleucus*	*conchatus*
278	275	— — *pantoleucus*	—
		— — *mutilus*	*scyphoïdes* (major)
279	195	— — *ostreatus*	—
280	196	— — — var. *euosmus*	—
281	180	— — *revolutus*	—
282	228	— — *salignus*	*ostreatus* (genuinus)
283	291	— — *acerinus*	*dryinus*
284	258	— — *petaloides*	—
		— — *serotinus*	malè

Maire	Rea	No. of bound volume	No. printed on Plate
corticola	*corticola*	250	164
hiemalis ?	*hiemalis*		
—	*setosa*	251	193
capillaris	*capillaris*		
—	—		
—	*hydrogramma*	252	239
maura	*maura*	253	287
?	—		
Postii	*Postii*	254	194
pyxidata	*pyxidata*		
?	—	255	288
—	—		
—	—	256	240
—	*sphagnicola*	257	289
—	—		
onisca	*onisca*	258	209
umbellifera var. *flava*	*umbellifera* var. *flava*		
—	—	259	250
—	*hepatica*		
—	*muralis*		
umbellifera	*umbellifera*	260	271
—	—	261	272
—	*retosta*		
—	*abhorrens*		
—	—	262	241
griseo-pallida	—		
?	*stellata*, but should be white		
campanella	*campanella*	263	273
Marasmius fulvo-bulbillosus	*cauticinalis*		
picta ?	*picta*		
—	*camptophylla*	264	210
grisea	*grisea*		
—	*umbratilis*	265	274
fibula et var. *Swartzii*	*fibula* et var. *Swartzii*		
—	*pseudo-directa*	266	251
Mycena rorida ?	—		
integrella ?	*gracillima*	267	252
?	*bullula*		
cuspidata Quél. ?	—		
corticatus = *dryinus*	*corticatus*	268	290
corticatus = *dryinus*	*dryinus*	269	226
ostreatus var. *columbinus*	*columbinus*	270	253
ulmarius	*ulmarius*	271	227
—	—	272	254
palmatus	*palmatus*	273	255
ulmarius	not *craspedius*	274	256
lignatilis ?	*fimbriatus*	275	178
—	*Ruthae*		
lignatilis	*lignatilis*	276	257
—	*circinatus*		
Panus torulosus ?	*palmatus*	277	179
—	spores wrong for *pantoleucus*	278	275
mutilus (forme de *Omphalia scyphoides*)	*mutilus*		
cornucopiae	*sapidus* (spores lilac in mass)	279	195
ostreatus var.	*sapidus*	280	196
Panus torulosus ?	*revolutus* var. *anglicus* Massee	281	180
ostreatus	*ostreatus*	282	228
corticatus ? anneau non visible	not *acerinus*	283	291
geogenius forma *petaloides*	*petaloides*	284	258
serotinus	*serotinus*		

No. of bound volume	No. printed on Plate	Cooke	Quélet
285	211	*Agaricus* (*Pleurotus*) *mitis*	—
286	276	— — *gadinoides*	*dictyorhizus*
		— — *limpidus*	—
		— — *reniformis*	—
287	242	— — *lauro-cerasi*	—
		— — *tremulus*	malè
		— — *acerosus*	—
288	259	— — *porrigens*	—
		— — *septicus*	—
289	243	— — *mastrucatus*	—
		— — *atrocoeruleus*	—
290	260	— — *Leightoni*	*algidus* (junior)
		— — *algidus*	malè
291	244	— — *fluxilis*	—
		— — *cyphellaeformis*	—
		— — *applicatus*	non ! *striatulus* ?
292	212	— — *Hobsoni*	*dictyorhizus*
		— — *striatulus*	—
		— — *hypnophilus*	—
		— — *chioneus*	—
293	293	— (*Volvaria*) *bombycinus*	—
294	294	— — *volvaceus*	—
295	295	— — *Loveianus*	=*puberulus*
296	296	— — *Taylori*	—
297	297	— — *speciosus*	—
298	298	— — *gloiocephalus*	—
299	299	— — *medius*	—
300	300	— — *temperatus*	—
		— — *parvulus*	—
301	301	— (*Pluteus*) *cervinus*	—
302	565	— — — var. *patricius*	—
303	302	— — — var. *eximius*	—
304	357	— — — var. *Bullii*	—
305	303	— — — var. *petasatus*	—
306	304	— — *umbrosus* / — — *hispidulus*	tous deux malè
307	517	— — *ephebius*	malè
308	597	— — *pellitus*	pas la spore
309	305	— — *nanus*	*lutescens*: *chrysophaeus* Q.
310	325	— — *spilopus*	*cervinus*
311	518	— — *semibulbosus*	—
		— — *violarius*	*Russula lateritia* ou *nitida*
312	598	— — *roseo-albus*	non
313	421	— — *leoninus*	—
314	309	— — *chrysophaeus*	*cervinus* (gracilis)
315	422	— — *phlebophorus*	*rhodopolius*, *leoninus* ou *Pleur. palmatus*
316	310	— (*Entoloma*) *sinuatus*	=*lividus* ou *clypeatus* major
317	311	— — *lividus*	malè
318	469	— — — var. *roseus*	potius *clypeatus*
319	312	— — *prunuloides*	—
320	313	— — *repandus*	*Inocybe repanda* (Bull.) Quél.
321	314	— — *placenta*	*elaphinum* Fr. ?
322	339	— — *helodes*	*prunuloides* (genuinus)
323	373	— — *helodes* var.	*Inocybe caesariata*

Maire	Rea	No. of bound volume	No. printed on Plate
mitis	*mitis*	285	211
dictyorhizus?	—	286	276
—	—		
—	—		
—	—	287	242
?	—		
acerosus	*acerosus*		
porrigens	*porrigens*	288	259
septicus	*septicus*		
mastrucatus	*mastrucatus*	289	243
atro-coeruleus	*atro-coeruleus*		
algidus	—	290	260
algidus?	*algidus*		
—	*fluxilis*	291	244
cyphelliformis	*cyphellaeformis*		
striatulus	*applicatus*		
dictyorhizus	—	292	212
striatulus	*striatulus*		
hypnophilus	*hypnophilus*		
chioneus	*chioneus*		
bombycina, non typique	—	293	293
volvacea	*volvacea*	294	294
Loveiana	*Loveiana*	295	295
Taylori	*Taylori*	296	296
speciosa	*speciosa*	297	297
speciosa, forme foncée (=*gloiocephala*)	*gloiocephala*	298	298
—	*media*	299	299
—	—	300	300
parvula	*parvula*		
cervinus	*cervinus*, stem characters poor	301	301
cervinus var. *patricius*	*cervinus* var. *patricius*	302	565
cervinus var. *eximius*	*cervinus* var. *eximius*, colour exaggerated	303	302
—	*Bullii*, a distinct species	304	357
rigens (Pers.)=*salicinus* Lange	*cervinus* var. *petasatus*	305	303
umbrosus Fr. non Pers., mais arête noire des lamelles non figurée / *semibulbosus*? ou *hispidulus*?	*umbrosus* / *hispidulus*	306	304
—	—	307	517
—	—	308	597
nanus / *nanus* var. *lutescens*	*nanus* / *lutescens*	309	305
?	*spilopus*	310	325
semibulbosus?	—	311	518
Un *Lepiota* ou *Entoloma*?	—		
palmatus	*palmatus*	312	598
leoninus / *leoninus* var. *caloceps*	*leoninus* typical	313	421
? forme grêle de *P. cervinus*	—	314	309
phlebophorus / *palmatus*	*phlebophorus* / *palmatus*	315	422
clypeatum?	*sinuatum*	316	310
lividum, mauvaise figure	*lividum*	317	311
?	—	318	469
prunuloides, peu typique	—	319	312
?	*prunuloides* poor	320	313
—	—	321	314
prunuloides, forme foncée	—	322	339
—	—	323	373

No. of bound volume	No. printed on Plate	Cooke			Quélet
324	315	*Agaricus*	(*Entoloma*)	*Persoonianus*	*Pluteus semibulbosus* ou *Lept. sericella* major ?
325	326	—	—	*Batschianus*	*madidus* (gracilis)
326	327	—	—	*Bloxami*	—
327	328	—	—	*ardosiacus*	—
328	581	—	—	*liquescens*	*Psathyra sarcocephala* avec spore de *Rhodophyllus*
329	341	—	—	*ameides*	malè, il est livide
330	470	—	—	*frumentaceus*	*Cortin. firmus* ?
331	306	—	—	*Saundersii*	*clypeatum* var. *albescens*
332	316	—	—	*fertilis*	*lividum*, malè
333	317	—	—	*jubatus*	—
334	318	—	—	*resutus*	—
		—	—	*griseocyaneus*	malè
335	307	—	—	*sericellus*	—
336	374	—	—	*Thomsoni*	*scabiosum* ou *griseo-cyaneum*
337	319	—	—	*clypeus*	*clypeatum* Fr.
338	342	—	—	*rhodopolius*	*clypeatum*
339	329	—	—	*Wynnei*	*Pl. villosus*
340	320	—	—	*costatus*	—
		—	—	*sericeus*	—
341	321	—	—	*nidorosus*	—
342	308	—	—	*speculum*	*Plut. pellitus*, non la spore
343	322	—	(*Clitopilus*)	*prunulus*	trop blanc
344	323	—	—	*orcella*	—
345	375	—	—	*mundulus*	pas blanc
		—	—	*cretatus*	*O. albula* ?
346	485	—	—	*popinalis*	—
347	486	—	—	*undatus*	—
348	501	—	—	*cancrinus*	—
349	324	—	—	*carneo-albus*	—
		—	—	*stilbocephalus*	*Nolanea incarnata*
350	599	—	—	*stilbocephalus* var.	*Coll. laccata*
351	487	—	—	*vilis*	*Lept. chalybaea* (vetusta)
352	330	—	(*Leptonia*)	*placidus*	—
353	331	—	—	*lampropus*	—
354	332	—	—	*aethiops*	—
		—	—	*solstitialis*	—
355	333	—	—	*serrulatus*	*anatina* ?
356	334	—	—	*euchrous*	—
357	335	—	—	*chalybeus*	—
358	549	—	—	*lazulinus*	—
359	336	—	—	*incanus*	*euchlorus*
360	488	—	—	*formosus* var. *suavis*	? malè
361	337	—	—	*chloropolius*	*Nolanea icterina* ?
362	376	—	(*Nolanea*)	*pascuus*	—
363	377	—	—	*Babingtonii*	pas blanc
		—	—	*mammosus*	—
364	378	—	—	*pisciodorus*	—
		—	—	*rufo-carneus*	*Lept. solstitialis* ou *C. laccata*
365	338	—	—	*icterinus*	—
366	379	—	—	*piceus*	—
		—	—	*coelestinus*	?
367	340	—	—	*verecundus*	—
		—	—	*rubidus*	*Leptonia sericella*
368	380	—	(*Eccilia*)	*parkensis*	—
		—	—	*carneo-griseus*	—

Maire	Rea	No. of bound volume	No. printed on Plate
—	—	324	315
—	—	325	326
Bloxamii = *madidum*	*Bloxamii*	326	327
Eccilia Mougeotii forma *leptonidea*	*ardosiacum* typical	327	328
L'hypothèse de Quélet est très vraisemblable	—	328	581
ameides	*ameides*	329	341
Inocybe jurana Pat. = *I. frumentacea* Bres. (an Bull?)	*rhodiola*	330	470
—	*Saundersii*	331	306
lividum	—	332	316
porphyrophaeum	*porphyrophaeum*	333	317
—	—	334	318
griseocyaneum, mauvaise figure	*griseocyaneum*		
Lept. sericella	*sericella*	335	307
?	—	336	374
clypeatum Fr.	*clypeatum*, rather poor	337	319
rhodopolium Fr.?	*rhodopolium*	338	342
—	—	339	329
costatum	*costatum*	340	320
sericeum	*sericeum*		
nidorosum	*nidorosum*	341	321
speculum	*speculum*	342	308
prunulus	*prunulus*	343	322
prunulus âgé	*prunulus*	344	323
pas *mundulus*	not *mundulus*	345	375
cretatus	*cretatus*		
—	*popinalis*	346	485
? teinte de *Collybia nitellina*	—	347	486
Eccilia cancrina	*cancrinus*	348	501
Leptonia sericella?	*sericella*	349	324
Nolanea incarnata?	*stilbocephala*		
Laccaria laccata?	*Smithii* Massee	350	599
Eccilia Mougeotii?	*vilis*	351	487
placida	*placida*	352	330
lampropoda	*lampropus*	353	331
—	*aethiops*	354	332
—	*solstitialis*		
serrulata var. *Berkeleyi* Maire	*serrulata* var. *Berkeleyi*	355	333
euchroa	*euchroa*, larger than usual	356	334
chalybea	*chalybea*	357	335
—	*lazulina* poor	358	549
incana = *euchlora*	*incana*	359	336
—	—	360	488
Nolanea icterina?	—	361	337
staurospora Bres. à spores mal figurées	*proletaria*	362	376
Babingtonii (trop pâle)	—	363	377
mammosa	*mammosa*		
Naucoria Cucumis	*Cucumis*	364	378
Nolanea infula?	*rufo-carnea*		
icterina	*icterina*	365	338
Naucoria Cucumis	*Cucumis*	366	379
?	—		
—	*verecunda*	367	340
Clitopilus cretatus? spores non anguleuses	*rubida*		
—	—	368	380
—	*carneo-grisea*		

No. of bound volume	No. printed on Plate	Cooke			Quélet
369	613	*Agaricus*	(*Eccilia*)	*griseo-rubellus*	malè
		—	—	*flosculus*	—
		—	—	*acus*	*sericellus*
370	343	—	—	*atro-punctus*	—
		—	—	*rhodocyclus*	—
371	344	—	(*Claudopus*)	*variabilis*	—
		—	—	*depluens*	pas blanc
		—	—	*byssisedus*	blanc
372	345	—	(*Acetabularia*)	*acetabulosus*	*Hyphol. fatuum, Psathyra torpens*
373	346	—	(*Pholiota*)	*aureus*	—
374	347	—	—	— var. *Herefordensis*	benè, genuinus
375	348	—	—	*caperatus*	malè, plutôt *aureus*
376	349	—	—	*terrigenus*	—
377	358	—	—	*erebius*	pas violeté
378	359	—	—	*ombrophilus*	*erebia?*
379	350	—	—	*togularis*	(non Bull.) Fr.=*Arrhenii* Fr.
380	423	—	—	*durus*	très blanc!
381	360	—	—	*praecox*	?
382	361	—	—	*radicosus*	—
383	362	—	—	*pudicus*	—
384	363	—	—	*leochromus*	*aegerita* (gracilis)
385	364	—	—	*capistratus*	*aegerita* (vetustior)
386	453	—	—	*aegerita*	malè, trop jaune
387	365	—	—	*aegerita*	—
388	600	—	—	*comosus*	=*destruens* Brond.
389	366	—	—	*heteroclitus*	*destruens*
390	351	—	—	*aurivellus*	—
391	367	—	—	*squarrosus*	benè
392	471	—	—	— var. *Mulleri*	—
393	614	—	—	— var. *verruculosus*	—
394	352	—	—	*spectabilis*	*aureus*
395	353	—	—	*adiposus*	—
396	368	—	—	*flammans*	malè
397	369	—	—	*junonius*	*? aurea* (gracilior)
398	370	—	—	*tuberculosus*	—
		—	—	*curvipes*	—
399	502	—	—	*cruentatus*	ou *Flammula azyma* Fr.?
400	371	—	—	*dissimulans*	*Ph. erebia*
401	354	—	—	*Cookei*	ou *gummosa*
402	355	—	—	*mutabilis*	—
403	372	—	—	*marginatus*	*unicolor*
404	356	—	—	*mustelinus*	—
		—	—	*unicolor*	*marginata*
405	503	—	—	*pumilus*	var. *humicola*
		—	—	*mycenoïdes*	?
406	424	—	(*Inocybe*)	*hystrix*	—
407	389	—	—	*calamistratus*	—
408	582	—	—	*lanuginosus*	*dulcamara*
		—	—	*dulcamarus*	*lucifuga*
409	425	—	—	*plumosus*	—
		—	—	*cincinnatus*	—
410	390	—	—	*haematus*	*corydalina* (vetustior)
411	472	—	—	*pyriodorus*	*? caesariata*
412	473	—	—	*incarnatus*	*repanda*
413	391	—	—	*scaber*	—

Maire	Rea	No. of bound volume	No. printed on Plate
?	*griseo-rubella*	369	613
—	*flosculus*		
Leptonia sericella (forme décurrente)	*acus*		
—	*atro-puncta*	370	343
—	—		
variabilis	*variabilis*	371	344
—	*depluens*		
byssisedus (trop gris)	*byssisedus*		
Bolbitius bulbillosus	*acetabulosa*	372	345
spectabilis	*aurea*	373	346
aurea Fr. non Quél., forme colorée	*aurea*	374	347
aurea Fr. non Quél.	—	375	348
Flammula gummosa	*ochrochlora* typical	376	349
erebia (trop violacé)	*erebia*	377	358
Peut-être un gros *Stropharia inuncta* ?	*ombrophila*, very large example	378	359
togularis Fr. non Ricken	*togularis*	379	350
dura (trop coloré)	*dura*	380	423
{ *praecox* (fig. sup.) / *dura* (fig. inf.) }	*praecox*	381	360
Hebeloma radicosum	*radicosum*	382	361
cylindracea = *aegerita*	*aegerita*	383	362
cylindracea	*leochroma*	384	363
cylindracea forma *fuscescens*	*aegerita*	385	364
cylindracea forma *fuscescens*	*aegerita*	386	453
cylindracea forma	*aegerita*	387	365
destruens	*destruens*	388	600
destruens forma	*destruens*	389	366
aurivella ou *adiposa*?	*aurivella*	390	351
squarrosa	*squarrosa*	391	367
Mulleri (espèce distincte)	*Mulleri*	392	471
squarrosa (forme pâle)	*squarrosa* var. *verruculosa*	393	614
spectabilis	*spectabilis*	394	352
adiposa	*adiposa*	395	353
flammans	*flammans*	396	368
spectabilis, forme grêle	*Junonia*	397	369
?	*squarrosa* var. *verruculosa*	398	370
curvipes	*curvipes* (flesh of stem darker)		
—	*cruentata*	399	502
ombrophila ?	*dissimulans*	400	371
Flammula gummosa	*ochrochlora*	401	354
mutabilis	*mutabilis*	402	355
unicolor	*unicolor*	403	372
—	*mustelina*	404	356
marginata	*marginata*		
marginata	*pumila*	405	503
?	*togularis*		
hystrix	*hystrix*	406	424
calamistrata	*calamistrata*	407	389
dulcamara ?	*dulcamara*	408	582
lucifuga	*dulcamara*		
?	*plumosa* prob., but no spores	409	425
lanuginosa	*lanuginosa*		
piriodora ssp. *haemacta*	*haemacta*	410	390
piriodora	*pyriodora*	411	472
jurana Pat.	*incarnata*	412	473
—	*scabra*	413	391

No. of bound volume	No. printed on Plate	Cooke	Quélet
414	392	*Agaricus* (*Inocybe*) *maritimus*	*lanuginosa*
415	583	— — *lacerus*	—
416	393	— — *flocculosus*	*rimosus* (gracilis)
417	381	— — *Bongardii*	*rimosa*
418	382	— — *muticus*	—
419	426	— — *carptus*	forma robusta: *hirsuta*?
420	394	— — *deglubens*	*caesariata*
421	427	— — *obscurus*	*obscura* *cincinnata*
422	395	— — *echinatus*	*Inocybe*? ?
423	504	— — *schistus*	*rimosa* ou *fastigiata*
424	454	— — *fibrosus*	benè
425	396	— — *phaeocephalus*	*rimosa* vel *brunnea*
426	383	— — *fastigiatus*	*tomentosa*
427	397	— — *hiulcus*	*repanda* Bull.
428	398	— — *Curreyi*	*caesariata*?
429	384	— — *rimosus*	—
430	385	— — *asterosporus*	—
431	386	— — *eutheles*	—
432	505	— — *margaritispora*	? *lacera* (vetustissima) pas la spore
433	387	— — *destrictus*	—
434	519	— — *perbrevis*	*Cortinarius incisus* Fr.
435	428	— — *descissus*	—
		— — *Trinii*	*scabella*
436	399	— — *sambucinus*	—
437	388	— — *caesariatus*	*capucina* Fr.
438	400	— — *sindonius*	*geophila* (luxurians)
439	429	— — *lucifugus*	malè
		— — *Clarkii*	*geophila* ou *tomentosa*
440	401	— — *geophyllus*	—
441	402	— — *scabellus*	malè
442	520	— — *Rennyi*	*fusca*?
443	403	— — *trechysporus*	*plumosus*?
		— — *vatricosus*	*tomentosus*
444	404	— — *Whitei*	*lucifuga*?
		— — *tricholoma*	—
445	405	— (*Hebeloma*) *mussivus*	—
446	406	— — *fastibilis*	—
447	407	— — *senescens*	—
448	430	— — *glutinosus*	—
449	408	— — *testaceus*	?
450	409	— — *firmus*	forme de *crustuliniformis* aspect de *Cortinarius imbutus* ou *varius*
451	410	— — *claviceps*	*versipellis*
452	411	— — *mesophaeus*	*versipellis*
453	412	— — — forma *minor*	?
454	506	— — *subcollariatus*	*versipellis*
455	413	— — *sinapizans*	*crustuliniformis* B.
456	507	— — *crustuliniformis*	—
457	414	— — — forma *minor*	—
458	415	— — *longicaudus*	*elatus*
459	416	— — — var. *radicatus*	*versipellis*
460	417	— — *truncatus*	—
461	418	— — *nudipes*	*elatus*
462	419	— — *capniocephalus*	*versipellis*

Maire	Rea	No. of bound volume	No. printed on Plate
?	*maritima*	414	392
? non *lacera* Ricken	—	415	583
?	*flocculosa*	416	393
? non *Bongardii*	not *Bongardii*	417	381
?	*mutica*	418	382
?	—	419	426
?	*deglubens*	420	394
obscura	—}	421	427
cincinnata?	—}		
Lepiota echinata	*Lepiota haematosperma*	422	395
? ? *Entoloma* sp.?	*schista*	423	504
—	*fibrosa*	424	454
maculata Boud.?	*phaeocephala*	425	396
fastigiata	—	426	383
?	*Godeyi*	427	397
?	*fastigiata*	428	398
Queletii?	probably *Queletii*	429	384
asterospora=*rimosa* Fr. genuina	*asterospora*	430	385
eutheles	*tomentosa*	431	386
—	*margaritispora*	432	505
—	*destricta*	433	387
non *perbrevis. Cort. incisus*?	—	434	519
?	—	435	428
scabella	*Trinii*		
—	*sambucina*	436	399
—	*caesariata*	437	388
geophylla var. *alba*?	—	438	400
lucifuga	*lucifuga*	439	429
geophylla var. *alba*?	—		
geophylla var. *alba* et *violacea*	*geophylla*	440	401
?	—	441	402
?	—	442	520
trechispora	*trechyspora*	443	403
—	—		
—	—	444	404
Ripartites Tricholoma	*tricholoma*		
—	—	445	405
fastibile?	*fastibile*, pileus too deep in colour	446	406
senescens	*senescens*	447	407
Flammula lenta	*glutinosum*, pileus too dark	448	430
? pied ordinairement bulbeux	*testaceum*	449	408
?	—	450	409
versipelle var.	—	451	410
fig. sup. *versipelle*	*versipelle* }	452	411
fig. inf. *versipelle* var. *mesophaeum*	*mesophaeum* }		
versipelle var. *mesophaeum*	*mesophaeum*	453	412
—	—	454	506
sinapizans	*sinapizans*	455	413
sinapizans forma	*crustuliniforme*	456	507
crustuliniforme	*crustuliniforme* var. *minus*	457	414
longicaudum?	*longicaudum*	458	415
radicatum	*radicatum*	459	416
Rhodopaxillus truncatus ? ? spores trop grandes et trop amygdaliformes	*Tr. truncatum*	460	417
—	—	461	418
versipelle var. *mesophaeum*	*mesophaeum*	462	419

No. of bound volume	No. printed on Plate	Cooke			Quélet
463	420	*Agaricus* (*Hebeloma*)		*ischnostylus*	*elatus* (gracilis) ou *sacchariolens*
464	508	—	—	*magnimamma*	*versipellis*
		—	—	*petiginosus*	non! *mesophaeum*
465	431	—	(*Flammula*)	*gymnopodius*	? malè
466	437	—	—	*vinosus*	pas la couleur, *Pleur. Eryngii*?
467	438	—	—	*floccifer*	*Heb. glutinosum*
		—	—	*decipiens*	—
468	500	—	—	*clitopilus*	*Tricholoma truncatum*?
469	439	—	—	*lentus*	—
470	440	—	—	— long-stemmed form	—
471	474	—	—	*mixtus*	*carbonarius*
472	475	—	—	*juncinus*	*alnicola*
473	441	—	—	*gummosus*	*spumosa*?
474	476	—	—	*spumosus*	—
475	442	—	—	*carbonarius*	?
476	432	—	—	*filius*	? *Cortinarius*
477	433	—	—	*fusus*	*Heb. senescens*
478	434	—	—	— variety	*Pholiota aurea*
479	435	—	—	*astragalinus*	malè
480	443	—	—	*alnicola*	—
481	444	—	—	*flavidus*	*spumosus*
482	477	—	—	*inauratus*	*hybrida*
483	445	—	—	*conissans*	??
484	446	—	—	*inopus*	malè
485	436	—	—	*apicreus*	—
486	615	—	—	*hybridus*	*Pholiota confragosa*
487	447	—	—	*sapineus*	—
488	448	—	—	*picreus*	*liquiritiae*
489	616	—	—	*ochrochlorus*	*gummosa*
490	449	—	—	*helomorphus*	—
		—	—	*scambus*	—
491	450	—	—	*filiceus*	? *graminis*
492	451	—	(*Naucoria*)	*cidaris*	malè
493	452	—	—	*Cucumis*	—
494	455	—	—	*anguineus*	copiés de Fries
495	601	—	—	*centunculus*	—
		—	—	*horizontalis*	—
496	509	—	—	*semiflexus*	—
		—	—	*rimulincola*	*horizontalis*
		—	—	*rubricatus*	*Marasmius ramealis*
497	456	—	—	*abstrusus*	*pellucida*
498	489	—	—	*innocuus*	*Flam. carbonaria*
		—	—	*cerodes*	*Pluteolus dictyotus* Kalch.
499	457	—	—	*melinoides*	—
		—	—	*pusiolus*	malè
500	490	—	—	*nuceus*	—
		—	—	*glandiformis*	—
501	491	—	—	*badipes*	—
		—	—	*scolecinus*	—
502	478	—	—	*striaepes*	*Pluteolus dictyotus*
503	458	—	—	*sideroides*	malè
		—	—	*triscopus*	malè
504	617	—	—	*vervacti*	—
		—	—	*tenax*	*autochthona*
505	492	—	—	*pediades*	—

Maire	Rea	No. of bound volume	No. printed on Plate
sacchariolens?	*sacchariolens*	463	420
Inocybe sp.	—	464	508
Inocybe fastigiata? forma	—		
Clitocybe olearia? mais chair trop blanche	*sapinea*	465	431
Pleurotus Eryngii?	—	466	437
lenta	—	467	438
?	*decipiens*		
?	—	468	500
lenta	*glutinosum*	469	439
lenta	*glutinosum*	470	440
carbonaria (grêle)	*carbonaria*	471	474
alnicola?	—	472	475
—	—	473	441
—	—	474	476
carbonaria	*carbonaria*, large form	475	442
?	—	476	432
H. senescens?	—	477	433
forme décurrente stérile de *Pholiota spectabilis*?	—	478	434
rubicundula Rea	*rubicundula*	479	435
alnicola	*alnicola*	480	443
—	*flavida*	481	444
—	*inaurata*	482	477
conissans, mauvaise figure	*conissans*	483	445
Hypholoma epixanthum Fr.? Quél.!	*Hypholoma radicosum* Lange	484	446
—	*apicrea*	485	436
Ph. confragosa	*confragosa*	486	615
sapinea	*sapinea*	487	447
—	—	488	448
?	*ochrochlora*	489	616
?	*helomorphus*, spore wrong	490	449
Ripartites Tricholoma	*scamba*		
—	—	491	450
—	—	492	451
Cucumis	*Cucumis*	493	452
d'après Fries	*anguinea*	494	455
centunculus, trop pâle	*centunculus*	495	601
horizontalis	*horizontalis*		
—	—	496	509
rimulincola	—		
Mar. ramealis	*ramealis*		
?	*furfuracea*	497	456
Flam. carbonaria	—	498	489
?	*cerodes*		
—	*melinoides*	499	457
—	*pusiola*		
?	—	500	490
Cortinarius	—		
badipes	*badipes*	501	491
—	*escharoides*		
striipes	*striaepes*	502	478
—	—	503	458
Galera triscopa	—		
vervacti	*vervacti*	504	617
? n'a pas la teinte de *N. autochthona*	—		
pediades	*pediades*	505	492

No. of bound volume	No. printed on Plate	Cooke			Quélet
506	479	*Agaricus*	(*Naucoria*)	*arvalis*	—
507	493	—	—	*semiorbicularis*	—
		—	—	*tabacinus*	—
508	494	—	—	*myosotis* var. *major*	malè, *Cortinarius*
509	459	—	—	*temulentus*	malè
510	482	—	—	*latissimus*	*Coll. extuberans* ? *Ps. spadicea*
511	510	—	—	*porriginosus*	*Cortin. scandens*
512	511	—	—	*sobrius*	*crobulus*
		—	—	— var. *dispersus*	—
513	480	—	—	*erinaceus*	—
		—	—	*siparius*	? il est humicole
514	512	—	—	*conspersus*	malè
		—	—	*escharoides*	malè
515	513	—	—	*carpophilus*	—
		—	—	*graminicola*	*inquilina*
516	495	—	(*Pluteolus*)	*reticulatus*	—
517	460	—	(*Galera*)	*lateritius*	*Bolbitius apalus*
518	461	—	—	*tener*	—
		—	—	— var. *pilosellus*	—
519	462	—	—	*ovalis*	*tenera*
520	463	—	—	*antipus*	*tenera*
		—	—	*confertus*	—
521	481	—	—	*sparteus*	—
		—	—	*pygmaeo-affinis*	—
522	464	—	—	*vittaeformis*	malè
		—	—	*rubiginosus*	—
523	465	—	—	*hypnorum*	—
		—	—	*hypnorum*	—
524	466	—	—	*mniophilus*	malè
		—	—	*minutus*	est humicole
525	467	—	—	*ravidus*	malè
		—	—	*mycenopsis*	*Myc. epipterygia*
526	602	—	(*Tubaria*)	*cupularis* (var.)	*pellucida*
527	603	—	—	*furfuraceus*	—
528	483	—	—	— var. *trigonophyllus*	—
529	484	—	—	*paludosus*	—
530	468	—	—	*stagninus*	—
531	514	—	—	*embolus*	—
		—	—	*autochthonus*	*undulatus* Bull.
532	496	—	—	*crobulus*	—
533	497	—	—	*inquilinus*	malè
534	499	—	(*Crepidotus*)	*alveolus*	—
		—	—	*calolepis*	—
535	498	—	—	*mollis*	—
536	515	—	—	*haustellaris*	—
		—	—	*Rubi*	—
		—	—	*Phillipsii*	—
		—	—	*chimonophilus*	*variabilis*
537	516	—	—	*epigaeus*	*applanatus*
		—	—	*Ralfsii*	—
		—	—	*epibryus*	—
		—	—	*pezizoides*	*Pleurot. craterellus*
538	521	—	(*Psalliota*)	*augustus*	*villatica* ?
539	522	—	—	*Elvensis*	—
540	523	—	—	*arvensis*	—
541	584	—	—	— var. *purpurascens*	*sylvatica* var. *rubella* Gill.
542	524	—	—	*cretaceus*	*Lepiota pudica*

Maire	Rea	No. of bound volume	No. printed on Plate
arvalis	*arvalis*	506	479
semiorbicularis	*semiorbicularis*	507	493
tabacina?	*tabacina*		
—	*Myosotis* typical	508	494
Tubaria pellucida? mais spores trop grandes, et voile non figuré	*temulenta*	509	459
?	—	510	482
?	—	511	510
Tubaria crobulus	*sobria*	512	511
?	*pusiola*		
erinacea	*erinacea*	513	480
potius *Lepiota*	*siparia*		
conspersa	*conspersa*	514	512
escharoides? ? spore trop allongée	not *escharoides*		
carpophila	*carpophila*	515	513
Tubaria inquilina?	*graminicola*		
reticulatus	*reticulatus*	516	495
lateritia	—	517	460
tenera	*tenera*	518	461
e grege *G. tenerae*	*pilosella*		
tenera	*ovalis*	519	462
antipoda	*antipus*	520	463
—	—		
spartea	*spartea*	521	481
pygmaeo-affinis	*pygmaeo-affinis*		
vittiformis? teintes du chapeau fausses	—	522	464
—	*rubiginosa*		
Hypnorum	*hypnorum*	523	465
Sphagnorum	—		
lateritia?	—	524	466
inquilina?	—		
?	—	525	467
Myc. epipterygia?	not *mycenopsis*		
pellucida	*pellucida*	526	602
furfuracea	*furfuracea*	527	603
furfuracea forma	*furfuracea* var. *trigonophylla*	528	483
paludosa	*paludosa*	529	484
stagnina	*stagnina*	530	468
—	—	531	514
autochthona	*autochthona*		
crobulus	*crobulus*	532	496
inquilina?	*inquilina*	533	497
palmatus?	*alveolus*	534	499
calolepis	*calolepis*		
mollis	*mollis*	535	498
—	—	536	515
Nauc. effugiens	*effugiens*		
Phillipsii	*Phillipsii*		
—	—		
applanatus Quél. (an Fr.?)	—	537	516
—	*Ralfsii*		
—	—		
n'est pas *P. craterellus*	—		
Agaricus augustus	*Psaliota augusta*	538	521
Elvensis	*Elvensis*	539	522
arvensis Fr., Quél., non Pat.	*arvensis*	540	523
silvicola Vitt. var. *purpurascens* Cke.	*sylvicola* var. *purpurascens*	541	584
xanthodermus Genev. var. *lepiotoides* Maire ou *Lep. naucina*	*lepiotoides* Maire	542	524

No. of bound volume	No. printed on Plate	Cooke			Quélet
543	525	*Agaricus*	(*Psalliota*)	*pratensis*	—
544	526	—	—	*campestris*	*villatica* Brond.
545	527	—	—	— var. *hortensis*	*villatica*
546	528	—	—	— var. *costatus*	champignons alterés
		—	—	— var. *exannulatus*	*villatica*
547	529	—	—	— var. *sylvicola*	*sylvatica*, malè
548	585	—	—	— var. *villaticus*	—
549	530	—	—	*sylvaticus*	malè
		—	—	*sylvaticus*	—
550	531	—	—	*haemorrhoidarius*	—
551	532	—	—	*subgibbosus* (var.)	*Pholiota aegerita*, vetustior
552	533	—	—	*comtulus*	—
553	618	—	(*Pilosace*)	*Algeriensis*	?
554	550	—	(*Stropharia*)	*Percevali*	*Flammula spumosa*
555	551	—	—	*aeruginosus*	—
556	552	—	—	*albo-cyaneus*	*aeruginosa*
557	534	—	—	*inunctus*	malè
558	535	—	—	*coronillus*	lamelles brun-pourpre
559	536	—	—	*melaspermus*	benè
560	553	—	—	*squamosus*	—
561	554	—	—	*thraustus*	—
562	555	—	—	— var. *aurantiacus*	? *ericetorum*
563	556	—	—	*Worthingtoni*	*aeruginosa*
564	604	—	—	*luteo-nitens*	*Hyph. appendiculatum* Bull.
565	537	—	—	*merdarius*	*Flammula carbonaria*
566	538	—	—	*stercorarius*	*semiglobata*
567	539	—	—	*semi-globatus*	—
568	540	—	—	*caput-medusae*	? *cotonea*, vetustior
569	541	—	—	*Jerdoni*	*squamosa*
570	542	—	—	*spintriger*	—
571	619	—	—	*hypsipus*	*Hyph. Candolleanum*
572	557	—	(*Hypholoma*)	*sublateritius*	—
573	558	—	—	— var. *squamosus*	—
574	559	—	—	*capnoides*	—
575	560	—	—	*epixanthus*	—
576	561	—	—	*fascicularis*	—
577	562	—	—	— var. *elaeodes*	—
578	586	—	—	*dispersus*	malè
579	587	—	—	*oedipus*	*Stroph. versicolor*
		—	—	*punctulatus*	—
580	543	—	—	*storea* var. *caespitosus*	*Stroph. cotonea*
581	566	—	—	*lacrymabundus*	? *cotonea*, vetustior
582	563	—	—	*velutinus*	—
583	564	—	—	*pyrotrichus*	—
584	544	—	—	*cascus*	*appendiculatum*
585	545	—	—	*lanaripes*	*appendiculatum*, vetustius
586	546	—	—	*Candolleanus*	*appendiculatum*
587	547	—	—	*appendiculatus*	malè
588	548	—	—	*leucotephrus*	*appendiculatum*
589	605	—	—	*egenulus*	*Psathyra cernua*
		—	—	*hydrophilus*	malè
590	567	—	(*Psilocybe*)	*sarcocephalus*	—

Maire	Rea	No. of bound volume	No. printed on Plate
pratensis ?	*pratensis*	543	525
campestris	*campestris*	544	526
villaticus ?	*hortensis* as species	545	527
haemorrhoidarius ? forme pâle forme de *pratensis*?	varieties of *campestris*	546	528
silvicola ? pas assez blanc	*sylvicola* as species	547	529
villaticus	*villatica* as species	548	585
silvaticus ?	*sylvatica*	549	530
silvicola var.	*perrara*		
haemorrhoidarius	*haemorrhoidaria*	550	531
Ph. cylindracea (= *aegerita*)	—	551	532
comtulus	*comtula*	552	533
forme à très grandes spores qui reste inconnue	—	553	618
forme de *Stroph. depilata* Fr. (teste Plowright)	*Percevalii*, distinct from *depilata*	554	550
aeruginosa	*aeruginosa*	555	551
aeruginosa var. *albo-cyanea*	*albocyanea*	556	552
inuncta	*inuncta*	557	534
coronilla	*melasperma* var. *lutescens*	558	535
melasperma	*melasperma*	559	536
squamosa	*squamosa*	560	553
squamosa ayant perdu les squamules du chapeau ?	*squamosa* var. *thrausta*	561	554
?	*squamosa* var. *aurantiaca*	562	555
aeruginosa var. *Worthingtonii*	*albo-cyanea*	563	556
?	—	564	604
merdaria ?	*merdaria*	565	537
stercoraria = *semiglobata*	*stercoraria*	566	538
stercoraria = *semiglobata*	*semiglobata*	567	539
caput-medusae	*caput-Medusae*	568	540
Hyph. lacrimabundum Fr. ?	—	569	541
spintrigera	*spintrigera*	570	542
?	*hypsipus*	571	619
sublateritium	*sublateritium*	572	557
sublateritium forma *squamosum*	*sublateritium* var. *squamosum*	573	558
capnoides	*capnoides*	574	559
fasciculare?	*epixanthum*	575	560
fasciculare	*fasciculare*	576	561
?	not *elaeodes*	577	562
dispersum peu typique	not *dispersum*	578	586
melantinum ?	—	579	587
—	—		
lacrimabundum Fr. non Quél. nec Bull.	*lacrymabundum* Fr.	580	543
idem	*caput*, *Medusae*	581	566
velutinum	*velutinum*	582	563
velutinum var. *pyrotrichum*	*pyrotrichum*	583	564
Candolleanum	*cascum*	584	544
Candolleanum forma ?	*appendiculatum*	585	545
Candolleanum	—	586	546
Candolleanum, mais la forme grêle cespiteuse à gauche est peut-être *P. cernua*	*appendiculatum*	587	547
leucotephrum, me paraît distinct	*leucotephrum*	588	548
Candolleanum ?	—	589	605
hydrophilum, mauvaise figure	—		
sarcocephala	*sarcocephala*	590	567

No. of bound volume	No. printed on Plate	Cooke	Quélet
591	620	*Agaricus* (*Psilocybe*) *sarcocephalus*	—
592	568	— — *ericaeus*	—
593	588	— — *sub-ericaeus*	—
594	569	— — *udus*	—
595	621	— — *canofaciens*	—
596	570	— — *areolatus*	*Fl. epixantha*
597	622	— — *agrarius*	*Mycena sudora*
598	607	— — *scobicula*	*Hyph. appendiculatum*
599	606	— — *chondrodermus*	—
		— — *ammophilus*	*Cort. milvinus*
600	608	— — *coprophilus*	malè
		— — *bullaceus*	malè
601	609	— — *physaloïdes*	malè, pas carminé
		— — *nucisedus*	*Tub. inquilina*
602	571	— — *atrorufus*	malè; *Psathyra corrugis*?
603	589	— — *comptus*	*Pluteolus apalus*
		— — *hebes*	—
604	572	— — *semilanceatus*	—
605	573	— — — var. *coeru-lescens*	—
606	610	— — *spadiceus*	—
607	574	— — *cernuus*	—
608	590	— — *foenisecii*	—
609	575	— (*Psathyra*) *conopileus*	*Panaeolus fimiputris*
610	591	— — *mastiger*	*Cort. acutus*
		— — *glareosus*	*Mycena zephirus*
611	576	— — *corrugis*	*Hyph. appendiculatum*
612	592	— — — var. *vinosus*	*Hyph. appendiculatum*
613	577	— — *pellospermus*	*Nolanea incarnata*
614	611	— — *spadiceo-griseus*	*Hypholoma*
615	593	— — *obtusatus*	*Hyph. fibrillosum*
616	594	— — *bifrons*	*Pan. acuminatus*
		— — var. *semitinctus*	*Psathyrella gracilis*
617	578	— — *semivestitus*	—
618	595	— — *fatuus*	malè
		— — *fibrillosus*	—
619	579	— — *helobius*	*fatua*
620	580	— — *Gordoni*	*pennata*
		— — *pennatus*	—
621	612	— — *gossypinus*	—
		— — *noli-tangere*	—
622	596	— — *microrhizus*	*bifrons*
		— — *urticaecola*	*gyroflexa*, minor
623	623	— (*Panaeolus*) *separatus*	malè
624	624	— — *egregius*	*Strop. lacrymabunda* Bull.
625	927	— — *leucophanes*	*separatus*
		— — *scitulus*	*Copr. ephemeroides*
626	625	— — *fimiputris*	*campanulatus*
627	626	— — *phalenarum*	—
628	627	— — *retirugis*	—
629	628	— — *sphinctrinus*	—
630	629	— — *campanulatus*	*conocephalus*
631	630	— — *papilionaceus*	—
632	631	— — *caliginosus*	*acuminatus*
		— — *subbalteatus*	—
633	632	— — *acuminatus*	malè
		— — *fimicola*	*acuminatus*
634	633	— (*Psathyrella*) *subatratus*	—

Maire	Rea	No. of bound volume	No. printed on Plate
sarcocephala var. *spadicea*	—	591	620
ericaea	*ericaea*	592	568
sub-ericaea ?	*subericaea*	593	588
Hyph. elongatum (Fr.) Ricken ?	*elongata*	594	569
Psathyra helobia ?	—	595	621
?	—	596	570
?	—	597	622
Hyph. Candolleanum forma ?	—	598	607
?	—	599	606
ammophila	*ammophila*		
coprophila	*coprophila*	600	608
bullacea	*bullacea*		
physaloides ?	*physaloides*	601	609
inquilina ?	*inquilina*		
corrugis ?	—	602	571
Galera apala ?	—	603	589
—	*hebes*		
semilanceata	*semilanceata*	604	572
—	var. *coerulescens*	605	573
H. hydrophilum	*hydrophilum*	606	610
cernua ?	*cernua*	607	574
foenisecii	*foenisecii*, typical except spores	608	590
Psathyrella subatrata ?	*conopilea*	609	575
Cort. acutus ?	—	610	591
Myc. zephirus ?	—		
P. conopilea ? spores trop grandes pour *H. appendiculatum*	*corrugis*	611	576
Hyph. Candolleanum	—	612	592
P. fatua ?	—	613	577
?	—	614	611
?	—	615	593
?	*bifrons*	616	594
gracilis	var. *semitincta*		
semivestita	*semivestita*	617	578
?	*fatua*	618	595
?	*fibrillosa*		
helobia ? pas typique	—	619	579
?	—	620	580
pennata	*pennata*		
gossypina ?	*gossypina*	621	612
—	—		
Psathyrella caudata ?	—	622	596
P. gyroflexa ?	*urticaecola*		
Anellaria separata	*separata*	623	623
Hyph. velutinum Fr.	—	624	624
Anellaria separata ?	—	625	927
Copr. ephemeroides ?	—		
campanulatus	*fimiputris*	626	625
fimiputris ?	*campanulatus*	627	626
retirugis	*retirugis*	628	627
sphinctrinus	*sphinctrinus*	629	628
campanulatus	*campanulatus*	630	629
papilionaceus	*papilionaceus*	631	630
spores plutôt de *campanulatus*	*campanulatus*, small form	632	631
?	—		
—	—	633	632
acuminatus	not *fimicola*		
subatrata	*subatrata*	634	633

No. of bound volume	No. printed on Plate	Cooke	Quélet
635	634	*Agaricus* (*Psathyrella*) *gracilis*	*Psathyra corrugis*
636	635	— — *hiascens*	malè
637	636	— — *aratus*	*Psathyra conopilea*
638	655	— — *trepidus*	?
		— — *hydrophorus*	—
639	637	— — *caudatus*	—
640	656	— — *pronus*	*crenata*
		— — *pronus*	—
641	657	— — *empyreumaticus*	*Nauc. temulenta*
		— — *disseminatus*	—
642	638	— — *atomatus*	*corrugis* *gracilis*
643	847	— — *crenatus*	*impatiens* ?
644	658	*Coprinus comatus*	—
645	659	— *ovatus*	—
646	660	— *sterquilinus*	malè
647	661	— *oblectus*	?
648	662	— *atramentarius*	—
649	848	— *soboliferus*	forme de *fuscescens*
650	663	— *fuscescens*	*hydrophorus* ou *micaceus*
651	664	— — var. *rimoso-squamosus*	*deliquescens* Bull.
652	665	— *picaceus*	—
653	666	— *aphthosus*	*Hyph. appendiculatum*
654	667	— *flocculosus*	*H. Candolleanum*
655	668	— *extinctorius*	—
656	669	— *fimetarius* var. *pullatus*	—
657	670	— — var. *macrorhizus*	—
658	671	— *cinereus*	—
659	672	— *tomentosus*	—
		— *niveus*	sur crottin, non sur aiguilles
660	673	— *micaceus*	! sublime de l'art
661	674	— *aratus*	*micaceus* forme
662	675	— *aratus*	*domesticus*
663	676	— *radians*	—
		— *papillatus*	*Psathyrella crenata*
664	677	— *alternatus*	*Panaeolus phalenarum*
665	678	— *deliquescens*	malè, *exstinctorius* ?
666	719	— *tardus*	—
667	679	— *congregatus*	—
668	680	— *Hendersonii*	—
		— *narcoticus*	*niveus*
669	681	— *lagopus*	—
670	682	— *macrocephalus*	*Psathyra pennata*
		— *nycthemerus*	malè
671	683	— *radiatus*	malè
		— *Spraguei*	*Psathyrella crenata*
672	684	— *domesticus*	malè
673	685	— *stercorarius*	malè
		— *ephemerus*	—
674	686	— *plicatilis*	malè
		— *filiformis*	*sceptrum*
675	687	— *hemerobius*	*hiascens*
		— *platypus*	—
676	688	*Hiatula Wynniae*	*Coprinus narcoticus* ?
677	689	*Bolbitius Boltoni*	*vitellinus*
678	928	— *vitellinus*	*Hygroph. chlorophanus*
		— *rivulosus*	*titubans* ou *Gal. tenera*
679	720	— *fragilis*	*titubans*
		— *apicalis*	forme maladive
680	690	— *titubans*	—

Maire	Rea	No. of bound volume	No. printed on Plate
corrugis ?	*gracilis*	635	634
?	*hiascens*	636	635
?	—	637	636
?	—	638	655
Copr. plicatilis ou *crenatus* ?	—		
caudata	*caudata*, large form	639	637
disseminata	*disseminata*	640	656
?	—		
Nauc. temulenta	—	641	657
disseminata	*disseminata*		
corrugis	—	642	638
gracilis	*gracilis*		
?	*crenata* typical	643	847
comatus	*comatus*	644	658
ovatus	*ovatus* var. of *comatus*	645	659
sterquilinus	*sterquilinus*	646	660
sterquilinus forma	*oblectus*	647	661
atramentarius	*atramentarius*	648	662
atramentarius forma	*atramentarius* var. *soboliferus*	649	848
micaceus, trop foncé	*fuscescens*	650	663
micaceus ?	*fuscescens* var.	651	664
picaceus	*picaceus*	652	665
Hyph. lacrimabundum Fr.	—	653	666
?	*flocculosus*	654	667
extinctorius	—	655	668
fimetarius	*cinereus*	656	669
fimetarius	*macrorhizus*	657	670
cinereus	*cinereus*	658	671
tomentosus	—	659	672
niveus	*niveus*		
micaceus	*micaceus*	660	673
micaceus ?	—	661	674
?	—	662	675
radians	*radians*	663	676
?	—		
?	—	664	677
?	—	665	678
Psathyra cernua ?	—	666	719
congregatus	*congregatus*	667	679
Hendersonii	*Hendersonii*	668	680
?	—		
lagopus	*lagopus*	669	681
?	—	670	682
?	—		
radiatus ?	*radiatus*	671	683
crenatus ?	—		
?	—	672	684
?	—	673	685
ephemerus	*ephemerus*		
plicatilis	*plicatilis*	674	686
?	—		
plicatilis	*hemerobius*	675	687
?	—		
?	—	676	688
vitellinus ?	*vitellinus*	677	689
vitellinus ?	*vitellinus*	678	928
?	—		
titubans	*fragilis*	679	720
apicalis	—		
titubans	*titubans*	680	690

No. of bound volume	No. printed on Plate	Cooke	Quélet
681	691	*Bolbitius tener*	*Galera apala* Fr.
682	692	*Cortinarius* (*Phlegmacium*) *triumphans*	*crocolitus*
683	693	— — *claricolor*	—
684	694	— — *turmalis*	*claricolor*
685	695	— — *crassus*	*torvus*, vetustior
686	696	— — *balteatus*	*variicolor* !
687	697	— — *sebaceus*	benè
688	799	— — *lustratus*	*argenteus*
689	698	— — *varius*	—
690	699	— — *cyanopus*	—
691	700	— — *variicolor*	*torvus*
692	863	— — — var. *nemorensis*	—
693	701	— — *largus*	malè
694	702	— — *Riederi*	—
695	703	— — *saginus*	*triumphans* forme
696	751	— — *russus*	*brunneo-fulvus*
697	704	— — *infractus*	*cotoneus* ou *prasinus*
698	705	— — *anfractus*	*infractus*
699	706	— — *Berkeleyi*	*torvus* ! vetustus
700	707	— — *Berkeleyi*	*torvus*
701	708	— — *multiformis*	—
702	709	— — — var. *flavescens*	—
703	710	— — *napus*	*turbinatus*
704	752	— — *allutus*	*Lactarius pubescens* ou *Cort. cinnabarinus* décoloré
705	711	— — *talus*	—
706	712	— — *glaucopus*	—
707	713	— — *calochrous*	—
708	721	— — *coerulescens*	pas la teinte
709	722	— — *coerulescens*	{ *dibaphus* } { ? }
710	723	— — *purpurascens*	!
711	724	— — *purpurascens*	—
712	725	— — — var. *sub-purpurascens*	—
713	753	— — *dibaphus* var. *xanthophyllus*	*turbinatus* forme
714	714	— — *turbinatus*	—
715	715	— — *corrosus*	—
716	716	— — *fulgens*	—
717	717	— — *fulmineus*	—
718	754	— — *orichalceus*	benè
719	735	— — *prasinus*	—
720	736	— — *atro-virens*	—
721	755	— — *scaurus*	malè
722	849	— — *herpeticus*	*glaucopus*
723	726	— — *cumatilis*	malè
724	727	— — *emollitus*	*ochroleucus*
725	728	— — *cristallinus*	*causticus*
726	729	— — *decoloratus*	—
727	730	— — *decolorans*	—
728	731	— — *porphyropus*	—
729	732	— — *croceo-coeruleus*	malè
730	733	— — *corruscans*	*sebaceus*
731	718	— — *papulosus*	*multiformis*
732	737	— (*Myxacium*) *arvinaceus*	*sebaceus*
733	738	— — *collinitus*	— (luxurians)
734	739	— — *mucosus*	malè
735	740	— — *mucifluus*	*collinitus*
736	741	— — *elatior*	—

Maire	Rea	No. of bound volume	No. printed on Plate
Galera apala ?	*tener*	681	691
crocolitus	*triumphans*	682	692
claricolor forme	*claricolor*	683	693
turmalis	—	684	694
praestans Cordier	—	685	695
variicolor	*balteatus*	686	696
—	*sebaceus*	687	697
argenteus ?	—	688	799
varius ? plutôt forme de *largus*	*varius*	689	698
largus jeune ?	*cyanopus*	690	699
praestans	*praestans*	691	700
largus ?	*variicolor* var. *nemorensis*	692	863
largus	*largus*	693	701
?	—	694	702
triumphans	*triumphans*	695	703
brunneo-fulvus?	—	696	751
?	*infractus*	697	704
infractus	*infractus*	698	705
praestans	*praestans*	699	706
praestans	*praestans*	700	707
multiformis	*multiformis*	701	708
elegantior?	*elegantior*	702	709
?	*napus*	703	710
?	—	704	752
multiformis	*multiformis*	705	711
glaucopus	*glaucopus*	706	712
calochrous	*calochrous*	707	713
caerulescens var. *caesio-cyaneus*	*caesio-cyanus*	708	721
caerulescens	*caerulescens*	709	722
purpurascens	*purpurascens*	710	723
purpurascens	*purpurascens*	711	724
purpurascens var.	*subpurpurascens*	712	725
xanthophyllus	*dibaphus* var. *xanthophyllus*	713	753
turbinatus	*turbinatus*	714	714
—	—	715	715
fulgens	*fulgens*	716	716
fulmineus	*fulmineus*	717	717
orichalceus	*orichalceus*	718	754
prasinus	*prasinus*	719	735
atro-virens	*atro-virens*	720	736
?	*scaurus*	721	755
glaucopus?	—	722	849
cumatilis	*cumatilis*	723	726
emollitus	*emollitus*	724	727
cristallinus	*crystalinus*	725	728
decoloratus	*decoloratus*	726	729
decolorans	*decolorans*	727	730
porphyropus	*porphyropus*	728	731
croceo-caeruleus	*croceo-caeruleus*	729	732
?	—	730	733
?	*papulosus*	731	718
?	—	732	737
collinitus	*collinitus*	733	738
mucosus	*mucosus*	734	739
collinitus	*collinitus*	735	740
elatior	*elatior*	736	741

No. of bound volume	No. printed on Plate	Cooke			Quélet
737	742	*Cortinarius* (*Myxacium*)		*elatior*	—
738	734	—	—	*grallipes*	*sebaceus*
739	767	—	—	*livido-ochraceus*	*albo-cyaneus* décoloré
740	768	—	—	*salor*	—
741	743	—	—	*delibutus*	—
742	831	—	—	*stillatitius*	—
743	744	—	—	*vibratilis*	—
744	769	—	—	*pluvius*	—
745	745	—	(*Inoloma*)	*argentatus*	—
746	746	—	—	— var. *pinetorum*	—
747	770	—	—	*violaceus*	*purpurascens*
748	815	—	—	*muricinus*	—
749	747	—	—	*albo-violaceus*	malè
750	756	—	—	*malachius*	*glaucopus*
751	771	—	—	*camphoratus*	malè, *varius*?
752	757	—	—	*traganus*	malè, *amethystinus*!
753	772	—	—	*tophaceus*	—
754	773	—	—	*redimitus*	*fulmineus*
755	774	—	—	*callisteus*	*percomis* ou *triumphans*
756	864	—	—	*callisteus*	*hinnuleus*
757	758	—	—	*Bulliardi*	malè
758	759	—	—	*vinosus*	*purpurascens*
759	760	—	—	*bolaris*	—
760	761	—	—	*pholideus*	—
761	762	—	—	*sublanatus*	—
762	763	—	—	*arenatus*	—
763	764	—	—	*penicillatus*	—
764	775	—	(*Dermocybe*)	*ochroleucus*	—
765	816	—	—	*decumbens*	*causticus*
		—	—	*diabolicus*	*rigens*
766	783	—	—	*tabularis*	*decoloratus*
767	784	—	—	*camurus*	*hinnuleus*
768	765	—	—	*caninus*	*delibutus*
769	817	—	—	*myrtillinus*	benè!!
770	766	—	—	*azureus*	*infractus*
771	748	—	—	*albo-cyaneus*	*sebaceus*
772	776	—	—	*anomalus*	*imbutus* décoloré ou *decoloratus*
773	850	—	—	*lepidopus*	*caninus*
774	785	—	—	*miltinus*	—
		—	—	*cinnabarinus*	—
775	786	—	—	*sanguineus*	malè
776	787	—	—	*anthracinus*	—
		—	—	*orellanus*	*brunneofulvus*
777	777	—	—	*cinnamomeus*	—
778	778	—	—	— var.	—
779	779	—	—	— var. *semi-sanguineus*	—
780	780	—	—	— var. *croceus*	—
		—	—	— var. *croceo-conus*	—
781	851	—	—	*uliginosus*	—
782	781	—	—	*infucatus*	—
783	749	—	—	*cotoneus*	—
784	832	—	—	*subnotatus*	*raphanoides*
785	750	—	—	*valgus*	*raphanoides*
786	833	—	—	*raphanoides*	*venetus*, vetustior
		—	—	*venetus*	—
787	788	—	(*Telamonia*)	*macropus*	*evernius*

Maire	Rea	No. of bound volume	No. printed on Plate
elatior	*elatior*	737	742
?	—	738	734
?	*livido-ochraceus*	739	767
salor	—	740	768
illibatus (spore allongée)	*delibutus* typical	741	743
stillatitius	—	742	831
vibratilis	*vibratilis*	743	744
—	*pluvius* typical	744	769
argentatus	*argentatus*	745	745
argentatus	*argentatus* var. *pinetorum*	746	746
purpurascens?	*purpurascens*	747	770
muricinus	—	748	815
argentatus?	*albo-violaceus*	749	747
?	—	750	756
?	—	751	771
traganus	*traganus*	752	757
tophaceus	*tophaceus*	753	772
?	—	754	773
?	—	755	774
hinnuleus	—	756	864
Bulliardii?	*Bulliardii* poor	757	758
purpurascens?	*vinosus*	758	759
bolaris	*bolaris*	759	760
pholideus	*pholideus*	760	761
?	*pholideus*	761	762
?	*pholideus*	762	763
penicillatus	—	763	764
ochroleucus	*ochroleucus*	764	775
cristallinus?	—	765	816
rigens	—		
decoloratus	—	766	783
hinnuleus?	—	767	784
certe non *delibutus*; *caninus*? sporae differunt	*caninus* poor	768	765
myrtillinus	*myrtillinus*	769	817
infractus pâle?	—	770	766
sebaceus?	—	771	748
?	*anomalus*	772	776
caninus	*lepidopus*	773	850
phoeniceus (=*miltinus* Quél.)	*phoeniceus*	774	785
cinnabarinus	*cinnabarinus*		
plutôt la teinte de *cinnabarinus*	? *cinnabarinus*	775	786
phoeniceus?	*anthracinus* poor	776	787
orellanus Fr. non Quél.	*orellanus*		
cinnamomeus	*cinnamomeus*	777	777
cinnamomeus	*cinnamomeus*	778	778
semisanguineus	*semi-sanguineus*	779	779
cinnamomeus var. *croceus*	var. *croceus*	780	780
cinnamomeus var. *croceoconus*	var. *croceoconus*		
cinnamomeus var. *uliginosus*	*uliginosus*	781	851
—	—	782	781
cotoneus	*sublanatus*	783	749
raphanoides	*subnotatus*	784	832
raphanoides	—	785	750
venetus	—	786	833
venetus	*venetus*		
evernius?	—	787	788

No. of bound volume	No. printed on Plate	Cooke	Quélet
788	800	*Cortinarius* (*Telamonia*) *laniger*	*bivelus*
789	852	— — *bivelus*	—
790	834	— — *bulbosus*	trop rouge
791	818	— — *urbicus*	—
792	819	— — *licinipes* var. *robustior*	*glandicolor*
793	865	— — *microcyclus*	*glandicolor*
794	801	— — *torvus*	*impennis*!
795	853	— — *impennis*	—
796	820	— — *scutulatus*	—
		— — *quadricolor*	*albo-cyaneus*
797	821	— — *evernius*	*anomalus*
798	866	— — *evernius*	*elatior*
799	867	— — *quadricolor*	*elatior*, gracilis
800	802	— — *armillatus*	*haematochelis*
801	803	— — *haematochelis*	—
802	804	— — *limonius*	*Tricholoma equestre*?
		— — *helvolus*	*hinnuleus*
803	805	— — *hinnuleus*	—
804	806	— — *gentilis*	mal copié de Fries
805	836	— — *helvelloïdes*	*obtusus* var. *gracilis*
806	835	— — *rubellus*	*orellanus*, major
807	822	— — *bovinus*	—
808	837	— — *nitrosus*	*infractus*, vetustior
809	823	— — *injucundus*	*largus* ou *varius*
810	854	— — *brunneus*	*impennis*
811	868	— — *brunneus*	—
812	789	— — *glandicolor*	*milvinus*?
813	855	— — *punctatus*	*hinnuleus* / *obtusus*
814	790	— — *triformis* var. *Schaefferi*	*claricolor*
815	869	— — *biformis*	*hinnuleus*
816	838	— — *periscelis*	copié de Fries
817	824	— — *flexipes*	—
		— — *flabellus*	*paleaceus* (non vert)
818	839	— — *psammocephalus*	—
		— — *ileopodius*	*hinnuleus*
819	807	— — *incisus* var. *B.*	*leucopus*?
820	825	— — *hemitrichus*	—
821	840	— — *stemmatus*	*hinnuleus*
		— — *Cookei*	malè, spore fauve non jaune
822	791	— — *rigidus*	*milvinus*
823	826	— — *paleaceus*	—
824	792	— (*Hydrocybe*) *firmus*	—
825	808	— — *subferrugineus*	*caninus*
826	793	— — *armeniacus*	—
827	856	— — *damascenus*	?
828	827	— — *privignus*	*anomalus*
829	809	— — *duracinus* Fries?	*armeniacus*?
830	841	— — *illuminus*	—
831	857	— — *tortuosus*	—
832	810	— — *dilutus*	*rigens*
833	828	— — *saturninus*	—
834	870	— — *imbutus*	*impennis*
835	842	— — *castaneus*	malè
836	871	— — *bicolor*	*albo-cyaneus*
837	794	— — *balaustinus*	*brunneo-fulvus*

Maire	Rea	No. of bound volume	No. printed on Plate
bivelus	—	788	800
bivelus	—	789	852
?	*bulbosus*	790	834
?	—	791	818
?	—	792	819
glandicolor	—	793	865
torvus Fr. non Quél.	*torvus*	794	801
idem ?	*impennis*	795	853
scutulatus	*scutulatus*	796	820
bicolor	*bicolor*		
bicolor	*bicolor*	797	821
evernius?	*elatior*	798	866
?	*quadricolor*	799	867
armillatus	*armillatus*	800	802
armillatus forma	*armillatus*	801	803
? peut-être un *Flammula* ou *Pholiota*	—	802	804
hinnuleus	*helvolus*		
hinnuleus	*hinnuleus*	803	805
gentilis	*gentilis*	804	806
saniosus ?	—	805	836
?	*orellanus*	806	835
?	*bovinus*	807	822
?	—	808	837
largus ?	—	809	823
torvus Fr. non Quél. ?	*brunneus*	810	854
brunneus	*brunneus*	811	868
?	*glandicolor*	812	789
? *obtusus* ?	—	813	855
claricolor ?	—	814	790
?	—	815	869
—	*periscelis*	816	838
flexipes?	*flexipes*	817	824
?	—		
psammocephalus	*psammocephalus*	818	839
hinnuleus f. *gracilis*	—		
?	*incisus*	819	807
hemitrichus	*hemitrichus*	820	825
?	—	821	840
Cookei	—		
?	*rigidus*	822	791
paleaceus=*flexipes* Ricken	*paleaceus*	823	826
—	—	824	792
subferrugineus	*subferrugineus*	825	808
armeniacus	*armeniacus*	826	793
?	—	827	856
?	—	828	827
duracinus?	*duracinus*	829	809
?	—	830	841
?	—	831	857
rigens ?	—	832	810
saturninus	*saturninus*, pileus darker than usual	833	828
?	—	834	870
castaneus ? figures inférieures	*castaneus*, fairly typical	835	842
bicolor	*bicolor* typical	836	871
balaustinus, trop rouge	*balaustinus*, too dark	837	794

No. of bound volume	No. printed on Plate	Cooke	Quélet
838	795	*Cortinarius* (*Hydrocybe*) *colus*	*obtusus*, major
839	829	— — *isabellinus*	—
840	782	— — *renidens*	—
841	796	— — *uraceus*	—
842	797	— — *jubarinus*	*hinnuleus*
843	858	— — *pateriformis* var. *major*	*duracinus* ?
844	859	— — *unimodus*	*erythrinus*
845	811	— — *dolobratus*	*armeniacus* !
846	812	— — *rigens*	—
847	813	— — *Krombholzii*	—
848	843	— — *Reedii*	*milvinus*
		— — *leucopus*	—
849	830	— — *scandens*	*leucopus*
850	798	— — *erythrinus*	*decipiens*
		— — *decipiens*	*hinnuleus*
851	844	— — *germanus*	malè
852	845	— — *obtusus*	—
		— — *acutus*	malè
853	846	— — *Junghuhnii*	*orellanus*
		— — *milvinus*	malè, pas jaune
854	860	— — *depressus*	*duracinus*
855	814	— — *fasciatus*	malè, *stemmatus* non jaune
856	879	*Gomphidius glutinosus*	—
857	880	— *roseus*	malè, plus rouge
858	881	— *viscidus*	—
859	882	— *maculatus* (var.)	—
860	883	— *gracilis*	—
861	872	*Paxillus* (*Lepista*) *lepista*	—
862	874	— — *panaeolus*	*helomorphus*
		— — *orcelloides*	*mundulus*
863	873	— — *extenuatus*	*geotropus*, forme
864	861	— — *lividus*	*Trich. cinerascens*
865	862	— — *revolutus*	*H. subradiatus* var. *lacmus*
866	884	— — *paradoxus*	—
867	875	— (*Tapinia*) *involutus*	malè, trop jaune
868	929	— — *leptopus*	trop jaune
869	876	— — *atrotomentosus*	malè
870	877	— — *crassus*	*vinosus* Bull. = *leptopus*
871	878	— — *panuoïdes*	malè
872	885	*Hygrophorus* (*Limacium*) *chrysodon*	! benè
873	886	— — *eburneus*	—
874	887	— — *cossus*	—
875	895	— — *pulverulentus*	malè, non le mien
		— — *penarius*	malè
876	888	— — *erubescens*	—
877	911	— — *pudorinus*	—
878	889	— — *glutinifer*	*olivaceo-albus*, malè
879	896	— — *arbustivus*	—
		— — *aureus*	—
880	912	— — *discoideus*	malè, potius *nitidus*
881	897	*Hygrophorus* (*Limacium*) *limacinus*	malè, non jaune olive
882	890	— — *olivaceo-albus*	malè, gracilis, vetustior
883	891	— — *hypothejus*	*Russula nauseosa*
884	898	— — *cerasinus*	—
885	899	— — *fusco-albus*	*Lactarius trivialis*

Maire	Rea	No. of bound volume	No. printed on Plate
?	—	838	795
?	—	839	829
renidens, trop pâle	—	840	782
uraceus	*uraceus*	841	796
?	—	842	797
duracinus ?	—	843	858
erythrinus	*erythrinus*	844	859
candelaris ?	*dolobratus*	845	811
duracinus ?	*duracinus*	846	812
?	*Krombholzii*	847	813
Inocybe sp.	—	848	843
leucopus	*leucopus*		
?	—	849	830
erythrinus	*erythrinus*	850	798
?	*decipiens*		
?	*germanus*	851	844
obtusus	*obtusus*	852	845
acutus ?	*acutus*		
concinnus Karst. (=*orellanus* Quél. non Fr.)	—	853	846
?	—		
duracinus	—	854	860
?	*fasciatus*	855	814
glutinosus	*viscidus* typical	856	879
roseus	*roseus*	857	880
viscidus	*viscidus*	858	881
maculatus	*maculatus*	859	882
gracilis	*gracilis*	860	883
?	—	861	872
Ripartites Tricholoma var. *helomorpha*	*panaeolus* typical	862	874
mundulus	*orcelloides* typical		
Clitocybe amara Fr.	—	863	873
Clit. fumosa Fr. = *cinerascens* Quél.	*lividus*	864	861
Hygr. pratensis var. *cinereus* ? ou *H. flavipes* Britz. à cause des spores rondes	—	865	862
Phylloporus rhodoxanthus	*paradoxus* typical	866	884
involutus, trop jaune	*involutus* poor	867	875
non ! spores differentes	—	868	929
atrotomentosus, trop rouge	*atrotomentosus*	869	876
? *Phylloporus rhodoxanthus*, vetustus	—	870	877
panuoïdes	*panuoïdes*	871	878
chrysodon	*chrysodon*	872	885
eburneus	*eburneus*	873	886
eburneus var. *cossus*	*cossus*	874	887
niveus, forme à pied rosé ?	—	875	895
penarius	*penarius*		
erubescens	*erubescens*	876	888
pudorinus (forma fagetorum)	*pudorinus*	877	911
olivaceo-albus ?	—	878	889
arbustivus	*arbustivus*	879	896
aureus	*aureus*		
discoideus Fr., Lange = *nitidus* Quél. non Fr.	*discoideus*	880	912
olivaceo-albus ?	—	881	897
olivaceo-albus, peu typique	*olivaceo-albus*, thin form	882	890
hypothejus, trop rougeâtre	*hypothejus*	883	891
cerasinus	*cerasinus*	884	898
fusco-albus ?	*fusco-albus*	885	899

No. of bound volume	No. printed on Plate	Cooke	Quélet
886	913	*Hygrophorus* (*Limacium*) *agathosmus*	malè, gris, *olivaceo-albus*
887	914	— — *mesotephrus*	malè, *discoideus*
888	915	— — *livido-albus*	*streptopus*
889	916	— (*Camarophyllus*) *caprinus*	—
890	930	— — *leporinus*	?
891	931	— — *nemoreus*	*Cortinarius armeniacus*
892	917	— — *pratensis*	—
893	932	— — — var. *pallidus*	—
		— — — var. *cinereus*	malè
894	892	— — *virgineus*	—
895	893	— — — var. *roseipes*	*niveus*, major
896	900	— — *niveus*	*gracilis*
		— — *russo-coriaceus*	*virgineus*, minor
897	901	— — *ventricosus*	*gliocyclus*
898	933	— — *fornicatus*	*obrusseus*, pâle
899	902	— — *distans*	*clivalis*
900	934	— — *Clarkii*	—
		— — *ovinus*	malè
901	918	— — *metapodius*	benè
902	935	— — *subradiatus*	—
		— — — var. *lacmus*	—
903	919	— — *irrigatus*	—
904	903	— (*Hygrocybe*) *Colemannianus*	*spadiceus* forme
		— — *foetens*	*Omphalia atropuncta*, vieux
905	937	— — *sciophanus*	—
		— — *mucronellus*	*conicus*, gracilis
906	938	— — *laetus*	—
907	936	— — *Houghtoni*	*laetus*! forme
908	904	— — *vitellinus*	—
		— — *ceraceus*	—
909	920	— — *coccineus*	*puniceus*
910	921	— — *miniatus*	*coccineus*
		— — *turundus* var. *mollis*	—
911	905	— — *Wynniae*	*Omphalia bibula* var. *virens*
		— — *micaceus*	*O. umbellifera* var. *flava*
912	922	— — *puniceus*	—
913	906	— — *obrusseus*	—
914	907	— — *intermedius*	*obrusseus*
915	908	— — *conicus*	—
916	894	— — *calyptraeformis*	—
917	923	— — — var. *niveus*	*amoenus* var. *alba*
918	909	— — *chlorophanus*	*coccineus* décoloré
919	910	— — *psittacinus*	—
920	924	— — *unguinosus*	—
921	925	— — *nitratus*	*caprinus* pâle
922	971	*Lactarius* (*Piperites*) *scrobiculatus*	—
923	972	— — *torminosus*	malè
924	973	— — *ciliciōides*	*scrobiculatus*, malè
925	987	— — *turpis*	—
926	1003	— — *controversus*	— (vetustus)
927	974	— — *pubescens*	*torminosus* (vetustior)
928	1083	— — *aspideus*	—
929	975	— — *insulsus*	—
930	1084	— — *utilis*	*Russula foetens*?
931	988	— — *blennius*	—
932	989	— — *hysginus*	malè
933	976	— — *trivialis*	*zonarius* (vetustus)
934	990	— — *circellatus*	—

Maire	Rea	No. of bound volume	No. printed on Plate
? plutôt *olivaceo-albus*	—	886	913
leucophaeus (= *discoideus* Quél. non Fr.)	*discoideus* typical	887	914
? ?	*livido-albus*	888	915
Camarophyllus Fr. = *caprinus*	*camarophyllus*	889	916
?	—	890	930
nemoreus, peu typique	*leporinus*	891	931
pratensis	*pratensis*	892	917
pratensis var. *pallidus*	*pratensis* var. *pallidus*	893	932
pratensis var. *cinereus*	*pratensis* var. *cinereus*		
virgineus	*virgineus*	894	892
virgineus f. *roseipes* (= *clivalis* Q., teste Patouillard)	*virgineus* var. *roseipes*	895	893
virgineus var. *niveus*	*niveus*	896	900
virgineus var. *russo-coriaceus*	*russo-coriaceus*		
forme de *virgineus*	—	897	901
plutôt *Trich. sejunctum* grêle	*clivalis*	898	933
?	—	899	902
?	*irrigatus*	900	934
ovinus	*ovinus*		
metapodius	*metapodius*	901	918
—	*subradiatus*	902	935
—	*lacmus*		
irrigatus	*irrigatus*	903	919
Colemannianus	*Colemannianus*	904	903
O. atropuncta	*foetens* typical		
sciophanoides Rea	*sciophanoides* Rea	905	937
?	*mucronella*		
laetus	*laetus*	906	938
laetus	*laetus*	907	936
vitellinus	*vitellinus*	908	904
ceraceus	*ceraceus*		
puniceus	*coccineus*, typical with yellow base	909	920
coccineus	*miniatus*	910	921
turundus var. *mollis*	*turundus* var. *mollis*		
O. Wynniae	*Wynniae*	911	905
pas *O. umbellifera* à cause des spores	*micaceus*		
puniceus	*puniceus*	912	922
obrusseus	*obrusseus*	913	906
obrusseus	*obrusseus*	914	907
conicus	*conicus*	915	908
calyptriformis	*calyptraeformis*	916	894
calyptriformis var. *niveus*	*calyptraeformis* var. *niveus*	917	923
chlorophanus	*chlorophanus*	918	909
psittacinus	*psittacinus*	919	910
unguinosus	*unguinosus*	920	924
nitratus ?	*nitratus*	921	925
scrobiculatus	*scrobiculatus*	922	971
torminosus	*torminosus*	923	972
?	*cilicioides*, pale form	924	973
turpis	*turpis*	925	987
controversus	*controversus*	926	1003
torminosus	*pubescens*	927	974
aspideus Fr. (*flavidus* Boud.)	*uvidus*	928	1083
insulsus	*insulsus*	929	975
Russ. delica ?	—	930	1084
blennius	*blennius*	931	988
hysginus ?	*hysginus*	932	989
insulsus, vieux ?	—	933	976
—	—	934	990

No. of bound volume	No. printed on Plate	Cooke	Quélet
935	991	*Lactarius* (*Piperites*) *uvidus*	*violascens*!
936	992	— — *flexuosus*	*uvidus* (vetustus)
937	993	— — *pyrogalus*	—
938	1004	— — *squalidus*	—
		— — *scoticus*	*argematus* ou *Russ. Raoultii*
939	977	— — *capsicum*	*rufus*
940	984	— — *chrysorrheus*	—
941	1005	— — *acris*	*picinus* Fr.
942	1006	— — *umbrinus*	*Russula fusca* Q.
943	978	— — *pargamenus*	*piperatus*
944	979	— — *piperatus*	—
945	980	— — *vellereus*	—
946	981	— — *exsuccus*	*Russula delica*
947	982	— (*Dapetes*) *deliciosus*	—
948	1007	— (*Russularia*) *pallidus*	—
949	983	— — *quietus*	*rufus*
950	1099	— — *aurantiacus*	—
951	1008	— — *cremor* var. *pauper*	*tithymalinus*?
952	1009	— — *vietus*	—
		— — *cyathula*	non, *argematus* ou *trivialis*
953	1085	— — *cyathula*	non! *glyciosmus* var. *lilacinus*
954	985	— — *rufus*	—
955	994	— — *helvus*	non! trop rouge
956	1010	— — *tomentosus*	*deliciosus* ou *tithymalinus*
957	995	— — *mammosus* var. *monstrosus*	—
958	1011	— — *glyciosmus*	?
959	996	— — *fuliginosus*	*azonites* ou *picinus*
960	997	— — *picinus*	—
961	998	— *lilacinus*	malè
		— *spinosulus* var. *violaceus*	malè
962	999	— *volemus*	—
963	1000	— *ichoratus*	espèce douteuse, forme de *volemus*
964	1012	— *serifluus*	—
965	1001	— *mitissimus*	—
966	1002	— *subdulcis*	pas assez rouge
967	1013	— *camphoratus*	*subdulcis*
		— *cimicarius*	*camphoratus*
968	986	— *subumbonatus*	*subdulcis*, forme approchant *tabidus*
		— *minimus*	*subdulcis* var.
969	1014	— *obnubilis*	*Hygr. hypothejus*
		— *obliquus*	*trivialis*, forme
970	1015	— *nigricans*	—
971	1016	— *albo-nigra*	*adusta*, forme
972	1051	— *adusta*	{ *adusta* var. *citrina* / *olivascens* }
973	1017	— *densifolia*	*nigricans*?
974	1067	— *semicrema*	*ochroleuca*
975	1068	— *delica*	var. *albata*
976	1018	— *mustelina*	malè
977	1035	*Russula olivascens*	—
978	1036	— *furcata*	*cyanoxantha*, vetustior
979	1086	— — var. *pictipes*	*cyanoxantha*, forme inconnue
980	1100	— — var. *ochroviridis*	*cyanoxantha*, forme inconnue
981	1019	— *sanguinea*	?
982	1020	— *rosacea*	non, *lepida*
983	1069	— *maculata*	non! rien de commun; *R. violacea* Q. forme obèse

Maire	Rea	No. of bound volume	No. printed on Plate
uvidus	*uvidus* typical	935	991
?	—	936	992
pyrogalus	*pyrogalus*	937	993
?	—	938	1004
?	—		
rufus ?	—	939	977
chrysorrheus	*chrysorrheus*	940	984
picinus	—	941	1005
?	—	942	1006
piperatus	*piperatus* var. *pergamenus*	943	978
piperatus	*piperatus* typical	944	979
vellereus	*vellereus*	945	980
R. delica var. *glaucophylla*	*R. chloroides*	946	981
deliciosus	*deliciosus*	947	982
pallidus	*pallidus*	948	1007
quietus, trop foncé	*quietus*	949	983
aurantiacus	*aurantiacus*	950	1099
état de *volemus* ?	—	951	1008
vietus ?	*vietus* typical	952	1009
?	—		
lilacinus ?	—	953	1085
rufus	*rufus*	954	985
paraît un vieux *torminosus*	—	955	994
torminosus ?	—	956	1010
—	—	957	995
glyciosmus, peu typique	*glyciosmus*	958	1011
picinus	*fuliginosus*	959	996
picinus	*picinus*	960	997
lilacinus	*lilacinus*	961	998
spinosulus var. *violaceus*	*spinosulus* var.		
volemus	*volemus*	962	999
volemus	—	963	1000
serifluus, trop violet	*serifluus*	964	1012
mitissimus	*mitissimus*	965	1001
quietus ? peu typique	—	966	1002
camphoratus	*camphoratus*	967	1013
camphoratus var. *obnubilus*	*cimicarius*		
camphoratus f. *subumbonatus*	—	968	986
?	—		
Hygr. hypothejus	—	969	1014
?	—		
nigricans	*nigricans*	970	1015
adusta var. *albo-nigra*	*adusta* var. *albo-nigra*	971	1016
adusta	*adusta*	972	1051
densifolia	*densifolia*	973	1017
?	—	974	1067
delica	—	975	1068
mustelina ?	*mustelina*	976	1018
alutacea var. *olivascens*?	*alutacea* var. *olivascens*	977	1035
cyanoxantha	—	978	1036
cyanoxantha forme	*furcata* var. *pictipes*	979	1086
cyanoxantha, vieux	—	980	1100
sanguinea	*sanguinea*	981	1019
sanguinea forme	*sanguinea*	982	1020
depallens forme	*atropurpurea*	983	1069

No. of bound volume	No. printed on Plate	Cooke	Quélet
984	1037	*Russula sardonia*	non! *decolorans* ou *olivascens* var. *citrina*
985	1021	— *depallens*	malè! *amoena* ou *depallens* var. *vinosa*
986	1022	— *purpurea*	*nitida* ou *palumbina*, spore?
987	1052	— *coerulea*	—
988	1023	— *drimeia*	*Queletii*
989	1070	— *lactea*	—
990	1071	— — var. *incarnata*	—
991	1039	— *virescens*	non! pas vert olive
992	1024	— *cutefracta*	—
993	1040	— *cutefracta*	—
994	1072	— *lepida*	forme
995	1073	— *lepida* var.	—
996	1025	— *rubra*	*sanguinea*
997	1087	— *rubra* Fries (?) var. *sapida*	—
998	1026	— *Linnaei*	—
999	1053	— *xerampelina*	? *nitida*
1000	1074	— *xerampelina*	? inconnu
1001	1041	— *olivacea*	!
1002	1075	— *vesca*	*depallens* var. *vinosa* ou *cyanoxantha*
1003	1042	— *du Portii*	*cyanoxantha*
		— *serotina*	—
1004	1054	— *lilacea*	—
1005	1088	— *azurea*	—
1006	1043	— *cyanoxantha*	—
1007	1076	— *cyanoxantha*	—
1008	1077	— *cyanoxantha* var.	—
1009	1044	— *heterophylla*	*graminicolor*
1010	1045	— *heterophylla*	*foetens*
1011	1089	— *galochroa*	—
1012	1055	— *consobrina*	—
1013	1056	— — var. *intermedia*	—
1014	1057	— — var. *sororia*	—
1015	1046	— *foetens*	—
1016	1047	— *subfoetens*	? *foetens*, minor
1017	1058	— *fellea*	—
1018	1027	— *elegans*	*delica*?
1019	1028	— *Queletii*	—
1020	1029	— *expallens*	*sanguinea*, minor
1021	1030	— *emetica*	*rosacea*
1022	1031	— *Clusii*	?
1023	1059	— *fallax*	*lilacea* Q.
1024	1101	— *pectinata*	*foetens*, minor
1025	1049	— *ochroleuca*	—
1026	1038	— *granulosa*	*ochroleuca*
1027	1090	— *aeruginea*	—
1028	1091	— *fragilis*	—
1029	1060	— — var. *violacea*	aspect de *lilacea*
		— — var. *niveus*	—
1030	1048	— *fingibilis*	*ochroleuca*
1031	1078	— *citrina* Gillet	*lutea*
1032	1032	— *punctata* var. *leucopus*	*nitida* forme

Maire	Rea	No. of bound volume	No. printed on Plate
Queletii var. *flavovirens*?	—	984	1037
depallens = *atropurpurea* Krombh.	*atropurpurea* var. *depallens*	985	1021
depallens?	*atropurpurea* var. *depallens*	986	1022
caerulea	*caerulea*	987	1052
sardonia Fr. non Bres.	*drimeia* = *sardonia* Fr.	988	1023
lactea	*lactea*	989	1070
lactea var. *incarnata*	*incarnata*	990	1071
{ *virescens* / ? }	*virescens*	991	1039
cutifracta	*cutifracta*	992	1024
cutifracta	*cutifracta*	993	1040
{ *rosea* Quél. / *lepida* }	*lepida*	994	1072
{ *xerampelina* jeune / *rosea* Quél. }	*lepida*	995	1073
atrorubens Quél.	*atropurpurea* typical	996	1025
melliolens forme foncée?	*atropurpurea* typical	997	1087
xerampelina var. *erythropoda*?	*Linnaei* typical	998	1026
grisea?	—	999	1053
{ *xerampelina* / ? fig. inférieure }	*xerampelina* / *fusca*	1000	1074
alutacea forme	*olivacea* typical	1001	1041
cyanoxantha forme?	*vesca*	1002	1075
xerampelina var.	—	1003	1042
serotina	*serotina*		
vesca (sensu Bres.) ? ou *lilacea* géant	*lilacea*	1004	1054
azurea	*azurea*	1005	1088
cyanoxantha	*cyanoxantha*	1006	1043
idem	*cyanoxantha*	1007	1076
grisea Bres.?	*cyanoxantha*	1008	1077
heterophylla	*heterophylla*	1009	1044
heterophylla forme	*heterophylla*	1010	1045
galochroa	*galochroa*	1011	1089
consobrina	*consobrina*	1012	1055
pectinata var.	*consobrina* var. *sororia*	1013	1056
idem	*pectinata*	1014	1057
foetens	*foetens*	1015	1046
subfoetens sensu Maire = *farinipes* Romell	*laurocerasi*	1016	1047
fellea	*fellea*	1017	1058
elegans	—	1018	1027
Queletii	*Queletii*	1019	1028
Queletii forme	*drimeia*	1020	1029
rosacea Quél. non Fr.	*emetica*	1021	1030
emetica	*emetica* var. *Clusii*	1022	1031
fallax = *olivaceoviolascens* Gill.	*emetica* var. *fallax*	1023	1059
pectinata?	*pectinata*	1024	1101
ochroleuca	*ochroleuca*	1025	1049
?	*ochroleuca* var. *granulosa*	1026	1038
aeruginea? ou *cyanoxantha* forme	*graminicolor*	1027	1090
fragilis	*fragilis* typical	1028	1091
violacea Quél.?	*violacea*	1029	1060
fragilis var. *nivea*	*fragilis* var. *nivea*		
ochroleuca?	*ochroleuca*	1030	1048
citrina Gill. non Quél.	*citrina*	1031	1078
nauseosa Fr. forme = *Turci* Bres. sensu Maire	—	1032	1032

No. of bound volume	No. printed on Plate	Cooke	Quélet
1033	1033	*Russula veternosa*	—
1034	1092	— *veternosa*	*chamaeleontina*? spore?
1035	1081	— *roseipes* var.	*xerampelina*, gracilis, spore?
1036	1034	— *integra*	—
1037	1093	— *integra*	*fusca*?
1038	1094	— — var. *alba*	*olivascens* var. *citrina*, aspect de *foetens*
1039	1079	— *decolorans*	!
1040	1061	— *Barlae*	?
1041	1080	— *aurata*	?
1042	1062	— *nitida* var.	*Barlae*
1043	1063	— *nitida*	—
1044	1095	— *pulchralis*	*puellaris*
		— *nitida* var. *cupraea*	*fusca*, minor
1045	1064	— *armeniaca*	*chamaeleontina*
1046	1065	— *puellaris*	—
1047	1066	— *puellaris* var.	*nitida*
1048	1096	— *alutacea*	—
1049	1097	— *alutacea*	*fusca*?
1050	1050	— *ochracea*	—
1051	1082	— *lutea*	—
1052	1147	— *nauseosa*	—
1053	1102	— *nauseosa* var. *flavida*	*lutea*
		— *vitellina*	*ochracea*
1054	1098	— *chameleontina*	— au coin supérieur droit: *lilacea* Q.
1055	1103	*Cantharellus cibarius*	—
1056	1131	— *cibarius* var. *rufipes*	*cibarius*, vetustus
		— *Friesii*	*cibarius*
1057	1104	— *aurantiacus*	—
1058	1106	— *Brownii*	*albidus*
		— *umbonatus*	—
1059	1105	— *carbonarius*	—
1060	1107	— *albidus*	*cibarius* var. *albescens*
		— *Houghtoni*	*Marasmius incarnatus*
1061	1108	— *tubaeformis*	?
1062	1109	— *infundibuliformis*	?
1063	1110	— *cinereus*	*cornucopioides*, forme
		— *cupulatus*	? ?
1064	1111	— *leucophaeus*	*carbonarius*, forme
		— *Stevensoni*	*albidus*
1065	1115	— *muscigenus*	malè, il est cendré
		— *glaucus*	—
1066	1112	— *retirugis*	—
		— *lobatus*	non, gris
1067	1132	*Nyctalis caliginosa*	*parasitica*
		— *asterophora*	—
1068	1113	— *parasitica*	—
1069	1116	*Marasmius urens*	—
1070	1117	— *peronatus*	—
1071	1133	— *porreus*	*foetidus*?
1072	1118	— *oreades*	—

Maire	Rea	No. of bound volume	No. printed on Plate
veternosa forme	*veternosa*	1033	1033
veternosa	*veternosa* var.	1034	1092
roseipes ?	*roseipes*	1035	1081
Romellii Maire ?	*Romellii*	1036	1034
integra Fr. ?	*integra*	1037	1093
Romellii pâle?	*Romellii*	1038	1094
decolorans	*decolorans*	1039	1079
xerampelina var. ?	*xerampelina*	1040	1061
aurata	*aurata*	1041	1080
?	—	1042	1062
nitida ? *nauseosa* Fr. ?	— —	1043	1063
puellaris ?	*nitida* var. *pulchralis*	1044	1095
nitida	*nitida* typical		
chamaeleontina	*lutea* var. *armeniaca*	1045	1064
puellaris	*puellaris*	1046	1065
xerampelina forma gracilis?	*puellaris* var. *intensior*	1047	1066
alutacea	*alutacea*	1048	1096
xerampelina	*xerampelina*	1049	1097
?	—	1050	1050
lutea	*lutea*	1051	1082
nauseosa Fr. (= *Turci* Bres.)	—	1052	1147
lutea ? ou forme pâle de *nauseosa*	—	1053	1102
lutea forma?	*lutea* var. *vitellina*		
formes voisines de *chamaeleontina*: en haut à droite: *lilacea* Quél. les 4 autres supérieures et les deux inférieures: *ochrorosea* Maire inédit; les 3 du milieu = *R. abietina* Peck	*chamaeleontina*	1054	1098
cibarius	*cibarius*	1055	1103
cibarius vieux	*cibarius* var. *rufipes*	1056	1131
cibarius	—		
aurantiacus type et variété	*aurantiaca* *aurantiaca* var. *albida*	1057	1104
albidus	—	1058	1106
umbonatus	*umbonatus*		
carbonarius	*carbonarius*	1059	1105
aurantiacus, forme décolorée	—	1060	1107
?	—		
tubaeformis	*tubaeformis*	1061	1108
infundibuliformis	*infundibuliformis*	1062	1109
cornucopioides, forme à hymenium plissé	*cinereus*	1063	1110
?	—		
carbonarius	—	1064	1111
albidus	—		
?	*muscigenus*	1065	1115
glaucus	*glaucus*		
retirugis	*retirugis*	1066	1112
?	—		
?	—	1067	1132
asterophora	*asterophora* poor		
parasitica	*parasitica*	1068	1113
peronatus, trop foncé	*urens*	1069	1116
peronatus	*peronatus*	1070	1117
?	—	1071	1133
oreades, trop jaune	*oreades*	1072	1118

No. of bound volume	No. printed on Plate	Cooke	Quélet
1073	1119	*Marasmius plancus*	*Collybia extuberans*
		— *scorteus*	*globularis*
1074	1120	— *prasiosmus*	non, *scorteus*?
1075	1121	— *varicosus*	*fusco-purpureus* forme
		— *fusco-purpureus*	*Mycena pura*
1076	1122	— *terginus*	—
		— *archyropus*	*globularis* coloré
1077	1123	— *Wynnei*	*globularis*
		— *erythropus*	*terginus*
1078	1124	— *torquescens*	—
		— *impudicus*	? malè
1079	1125	— *scorodonius*	—
		— *calopus*	*Vaillantii*
1080	1126	— *Vaillantii*	—
		— *angulatus*	*Vaillantii*
		— *languidus*	*Omph. umbellifera*?
1081	1134	— *foetidus*	—
		— *cauticinalis*	—
1082	1127	— *amadelphus*	—
		— *candidus*	—
		— *ramealis*	—
1083	1128	— *alliaceus*	—
		— *cohaerens*	*fusco-purpureus*
1084	1129	— *rotula*	—
		— *graminum*	—
		— *androsaceus*	?
1085	1130	— *splachnoides*	*androsaceus*
		— *Curreyi*	*graminum*
		— *perforans*	malè
1086	1135	— *insititius*	malè
		— *Hudsoni*	*gelidus* Q.?
1087	1136	— *epichloë*	*caulicinalis*
		— *actinophorus*	*graminum*
		— *saccharinus*	—
1088	1137	— *epiphyllus*	—
		— *polyadelphus*	*saccharinus*
		— *spodoleucus*	*Pleur. cyphellaeformis*
1089	1138	*Lentinus tigrinus*	—
1090	1139	— *tigrinus*	—
		— *Dunalii*	—
1091	1140	— *lepideus*	—
1092	1141	— — monstrous form	—
1093	1142	— *cochleatus*	—
		— *vulpinus*	potius *flabelliformis* Schaeff.
1094	1143	— *scoticus*	*suaveolens*
1095	1148	— *fimbriatus*	—
		— *flabelliformis*	—
1096	1149	*Panus conchatus*	*flabelliformis*
		— *torulosus*	*flabelliformis*
1097	1144	— *stypticus*	—
		— *farinaceus*	*flabelliformis* forme d'hiver
		— *patellaris*	?
1098	1150	*Cantharellus devexus*	inconnu
		Xerotus degener	malè
1099	1114	*Trogia crispa*	—
		Schizophyllum commune	—

Maire	Rea	No. of bound volume	No. printed on Plate
?	—	1073	1119
Wynnei, petite forme pâle	—		
?	—	1074	1120
fusco-purpureus ?	*varicosus*	1075	1121
Mycena pura	—		
terginus	—	1076	1122
?	—		
Wynnei	*globularis* old	1077	1123
lupuletorum	*erythropus* typical		
torquescens	*torquescens*	1078	1124
impudicus	*impudicus*		
scorodonius	—	1079	1125
Vaillantii forma	—		
Vaillantii	*Vaillantii*	1080	1126
Vaillantii forma	—		
?	—		
foetidus	*foetidus* poor	1081	1134
fulvobulbillosus R. Fries, chapeau trop foncé	*cauticinalis* typical		
amadelphus	—	1082	1127
candidus	*candidus*		
ramealis	*ramealis*		
alliaceus	*alliaceus*	1083	1128
?	—		
rotula	*rotula*	1084	1129
graminum ?	*graminum*, stem should be bright		
androsaceus	*androsaceus*		
splachnoides	—	1085	1130
graminum ?	—		
perforans ? trop pâle	*perforans*		
?	*insititius*	1086	1135
Hudsonii	*Hudsonii*		
stipitarius ?	—	1087	1136
?	—		
saccharinus	*saccharinus*		
? spores trop petites	*epiphyllus*	1088	1137
Omphalia polyadelpha	*polyadelphus*		
Pleur. cyphellaeformis	—		
tigrinus	*tigrinus*	1089	1138
tigrinus	*tigrinus*	1090	1139
tigrinus	—		
lepideus	*lepideus*	1091	1140
lepideus, anomalie	*lepideus*, form not uncommon	1092	1141
cochleatus, trop rouge	*cochleatus*	1093	1142
Panus rudis ?	—		
?	*scoticus*	1094	1143
tigrinus	*fimbriatus*	1095	1148
torulosus?	—		
torulosus	*torulosus*	1096	1149
torulosus	*torulosus*		
stipticus	*stypticus*	1097	1144
?	—		
?	—		
?	var. of *replexus*	1098	1150
?	—		
crispa	*crispa*	1099	1114
commune	*commune*		

No. of bound volume	No. printed on Plate	Cooke	Quélet
1100	1145	*Lenzites betulina*	—
		— *flaccida*	—
1101	1146	— *sepiaria*	—
		— *abietina*	*saepiaria*
1102	939	*Agaricus* (*Amanita*) *solitarius*	*solitaria* Quél.
1103	1163	— — *rubescens*	—
1104	940	— — *vaginatus* var. *nivalis*	pas de violet
1105	941	— (*Lepiota*) *Friesii*	malè
1106	1164	— — *emplastrum*	*Am. rubens* ! spore anormale, ou forme anormale de *L. rachodes*
1107	1180	— — *hispidus*	—
1108	943	— — *felinus*	—
		— — *microphalis*	*felina*, gracilis
1109	942	— — *cepaestipes* var. *cretaceus*	benè
1110	1179	— — *licmophorus*	*cepaestipes* var. *lutea*
1111	639	— — *citrophyllus*	*cristata* malade, ou *clypeolaria*, gracilis
1112	944	— — *ianthinus*	*cristata*, gracilis
		— — *martialis*	*haematosperma*, gracilis
1113	955	— (*Armillaria*) *Jasonis*	*Lep. amianthina*
1114	1165	— — *focalis* var. *goliathus*	*Lep. ampla* P.
1115	1181	— — *Citri*	*mellea*, variété
1116	926	— (*Tricholoma*) *russula*	—
1117	642	— — *variegatus*	—
1118	641	— — *argyraceus* var. *virescens*	—
1119	947	— — *argyraceus* var. *chrysites*	!
1120	945	— — *inodermeus*	*Hygrophorus russula*
1121	1166	— — *tenuiceps*	*cartilagineum* ou *molybdinum*
1122	1151	— — *fallax*	*album* ou *inamoenum*
		— (*Clitocybe*) *cinerascens*	*expallens*
1123	956	— (*Tricholoma*) *borealis*	*Entoloma clypeatum*
1124	946	— — *pes-caprae*	*aggregatum*
1125	1182	— — *circumtectus*	*argyraceum* ? ou *luridum*
1126	640	— — *duracinus*	*cinerascens*
1127	957	— — *melaleucus* var. *polioleucus*	*grammopodium*, minus ?
1128	1183	— (*Clitocybe*) *opiparus*	*Trich. truncatum* Sch., très bonne figure
1129	644	— — *amplus*	—
1130	645	— — *fumosus*	—
1131	958	— — *subdecastes*	*Hygr. melizeus* ? ou *cossus* vieux
1132	643	— — *pergamenus*	*lignatilis*
1133	1184	— — *occultus*	*argyraceum*, ou *virgatum* ou *hordum*
1134	648	— — *monstrosus*	*Hygr. virgineus* ?
1135	646	— — *infundibuliformis* var. *membranaceus*	—
1136	647	— — *sinopicus*	—
1137	948	— — *zygophyllus*	*amarella*
1138	949	— (*Collybia*) *fodiens*	*maculata*

Maire	Rea	No. of bound volume	No. printed on Plate
betulina	*betulina*	1100	1145
flaccida	*flaccida*		
saepiaria	*saepiaria*	1101	1146
saepiaria, vieux	*abietina*		
echinocephala	*echinocephala*	1102	939
rubescens	*rubescens*	1103	1163
vaginata var. *nivalis*	*nivalis*	1104	940
Friesii	*Friesii*	1105	941
rhacodes	*rhacodes*	1106	1164
hispida	*hispida*	1107	1180
felina	*felina*, large form	1108	943
?	*micropholis*		
cepaestipes var. *cretaceus*	var. *cretaceus*	1109	942
lutea	*licmophora*	1110	1179
fig. inf. *citrophylla*	*citrophylla*	1111	639
lilacea Bres.?	—	1112	944
?	—		
amianthina	*amianthina*	1113	955
Amanita spissa forme	—	1114	1165
mellea forme	*mellea* var.	1115	1181
Hygrophorus Russula	*Hygr. Russula*	1116	926
—	*variegatum*	1117	642
scalpturatum forma	*argyraceum* var.	1118	641
idem	*argyraceum* var.	1119	947
Hygr. Russula? ou forme stérile de *Inocybe piriodora*	*inodermeum*, a good rare species	1120	945
Coll. platyphylla forma?	*aggregatum*	1121	1166
?	—	1122	1151
?	*cyathiformis*, from stem characters		
?	—	1123	956
pas *aggregata* à cause des spores	—	1124	946
atrosquamosum forma?	—	1125	1182
cinerascens Quél. non Fr.	*cinerascens* Bull., poor	1126	640
humilis forma	*melaleucum* var. *polioleucum*	1127	957
truncatum	—	1128	1183
transformis Britz., si les spores sont triangulaires	—	1129	644
aggregata var.	*cinerascens*	1130	645
idem	*cinerascens*	1131	958
idem	*pergamena*	1132	643
?	*Russula*? sp.	1133	1184
cerussata forma?	*monstrosa*	1134	648
infundibuliformis forma *membranacea*	*infundibuliformis* var. *membranacea*	1135	646
sinopica	*sinopica*, small form	1136	647
inornata	*zygophylla*	1137	948
Tricholoma irinum?	*fodiens*	1138	949

No. of bound volume	No. printed on Plate	Cooke	Quélet
1139	950	*Agaricus* (*Collybia*) *prolixus*	*distorta*
1140	652	— — *distortus* var.	—
1141	650	— — *velutipes* var. *rubescens*	—
1142	1168	— — *floccipes*	inconnu
1143	1167	— — *thelephorus*	*Mycena plicosa* ?
1144	651	— — *leucomyosotis*	*Mycena rugosa*
1145	649	— — *tenacellus*	—
1146	1185	— — *eustygius*	*Clit. inornata*
1147	1198	— — *murinus*	malè
1148	951	— (*Mycena*) *mirabilis*	*iris*
		— — *flavipes*	—
1149	952	— — *gypseus*	—
		— — *codoniceps*	*trachelina* Fr.
1150	1186	— — *consimilis*	*leptocephala*
1151	653	— — *leucogalus*	*galopus*
1152	1152	— (*Omphalia*) *chrysophyllus*	—
		— — *Postii*	—
1153	959	— (*Mycena*) *olivaceo-marginata*	*aurantio-marginata*
		— (*Omphalia*) *glaucophyllus*	—
		— — *rusticus*	—
1154	654	— (*Pleurotus*) *Ruthae*	*conchatus* ou *palmatus* ?
1155	954	— — *sapidus*	*conchatus*
1156	953	— — *columbinus*	*ostreatus*
1157	1169	— (*Pluteus*) *salicinus*	malè
		— (*Leptonia*) *asprellus*	malè, il est gris bistre
1158	1153	— (*Entoloma*) *nigro-cinnamomeus*	inconnu
1159	960	— (*Clitopilus*) *straminipes*	*Entoloma speculum*
1160	1170	— (*Nolanea*) *nigripes*	*Naucoria cucumis*
		— — *subglobosus*	*icterina*
1161	1171	— (*Pholiota*) *molliscorium*	*ombrophila*
1162	961	— (*Inocybe*) *perlatus*	*fastigiata*, forme obèse
1163	1174	— — *violaceo-fuscus*	*obscura*
1164	1173	— — *fasciatus*	*pyriodora*
1165	962	— (*Hebeloma*) *elatus*	—
1166	963	— — *nauseosus*	*longicaudum*
1167	964	— (*Flammula*) *purpuratus*	*Ph. confragosa* ? ou mieux *Tr. variegatum* ?
1168	1154	— — *nitens*	*Tr. phoenix* Mich. ou *pertinax* Fr. inconnu mais semble la même espèce
1169	1187	— (*Naucoria*) *lugubris*	malè
1170	966	— — *festivus*	—
1171	1155	— — *obtusus*	*Psil. sarcocephala* Fr.
1172	965	— — *hamadryas*	inconnu
1173	1172	— — *nasutus*	*myosotis*, variété
		— (*Pholiota*) *blattarius*	*Lep. echinata*, décoloré ou *Heb. erebium* Fr. gracile
1174	1156	— (*Galera*) *siligineus*	*apala*, *tenera*, etc.
1175	1175	— (*Tubaria*) *pellucidus*	*aquosa* ?
		— — *muscorum*	*Galera* Q.
1176	967	— (*Chitonia*) *rubriceps*	inconnu, espèce exotique
1177	968	— (*Psaliota*) *sagatus*	*semota* Fr., variété adulte
1178	1188	— (*Stropharia*) *merdarius* var. *major*	*squamosa*
1179	1189	— — *scobinaceus*	*Hyph. appendiculatum*

Maire	Rea	No. of bound volume	No. printed on Plate
distorta?	—	1139	950
distorta	*distorta* var.	1140	652
velutipes forma *rubescens*	*velutipes* var. *rubescens*	1141	650
Mycena maura Maire? trop grand	—	1142	1168
Mycena	—	1143	1167
?	*leucomyosotis* typical	1144	651
tenacella	*tenacella*	1145	649
Trich. immundum Berk. = *Ag. fumosus* Pers. non Fr.	—	1146	1185
?	—	1147	1198
Iris forma?	*marginella*	1148	951
flavipes = *Renati*	*flavipes*		
gypsea?	*gypsea*	1149	952
?	—		
?	—	1150	1186
galopoda var. *leucogala*	*galopus* var. *nigra*	1151	653
chrysophylla	—	1152	1152
Postii	—		
avenacea forme	*avenacea* var. *olivaceo-marginata*	1153	959
?	*glaucophylla*		
rustica	*rustica*		
palmatus	*palmatus*	1154	654
cornucopiae	*sapidus*	1155	954
ostreatus var. *columbinus*	*ostreatus* var. *columbinus*	1156	953
salicinus	*salicinus*	1157	1169
asprella	*asprella*		
?	—	1158	1153
?	*Lept. sericella*	1159	960
Nauc. Cucumis forme	*Nauc. Cucumis*	1160	1170
? e sporis potius *Pluteus*	—		
?	*molliscorium*	1161	1171
fastigiata forme	*perlata*	1162	961
obscura	*violaceofusca*	1163	1174
?	*fasciata*	1164	1173
elatum	*elatum*	1165	962
? ressemble à *H. sacchariolens* mais spore trop grande	—	1166	963
?	—	1167	964
? voir formes brunes exannulées de *Ph. cylindracea*	—	1168	1154
lugubris	*lugubris*	1169	1187
festiva	*festiva*	1170	966
?	—	1171	1155
?	—	1172	965
Psil. semi-lanceata	—	1173	1172
?	*blattaria*		
apala et *tenera*?	*Galera campanulata*	1174	1156
?	—	1175	1175
?	—		
rubriceps	*rubriceps*	1176	967
rubella Gill?	—	1177	968
stercoraria forma? ou plutôt *Hyph. capnoides*	—	1178	1188
Hyph. lacrimabundum Fr.? ou forme du groupe	*scobinaceum*	1179	1189

No. of bound volume	No. printed on Plate	Cooke	Quélet
1180	1176	*Agaricus* (*Hypholoma*) *catarius*	*Hyph. appendiculatum*
1181	1157	— — *instratus*	*hydrophilum*
1182	1177	— (*Psilocybe*) *areolatus*	*Stroph. Battarrae*?
1183	969	— — *Clivensis*	*Heb. elatum* gracile ou *Heb. sacchariolens*
1184	970	— (*Psathyra*) *gyroflexus*	—
1185	1158	— — *conopileus* var. *superbus*	*Psathyra fatua*
1186	1160	— (*Bolbitius*) *conocephalus*	*vitellinus*, blanchi; ou *apalus* exubérant
1187	1159	— — *grandiusculus*	*vitellinus* var. *Boltonii*
1188	1190	*Cortinarius* (*Phlegmacium*) *testaceus*	*subpurpurascens* Fr.
1189	1191	— (*Myxacium*) *nitidus*	*sebaceus* forma
1190	1192	— (*Telamonia*) *lucorum*	non, *evernius*
1191	1193	— — *croceo-fulvus*	*limonius* Fr.
1192	1178	— (*Hydrocybe*) *angulosus*	*cinnamomeus* forma
1193	1162	*Paxillus Alexandri*	malè
1194	1161	*Hygrophorus* (*Hydrocybe*) *spadiceus*	—
1195	1194	*Lactarius involutus*	*piperatus* ou *argematus*?
1196	1195	— *squalidus*	inconnu; *blennius*, *vietus*?
1197	1197	*Russula virginea*	*delica*, forme ou *lactea*
1198	1196	— *ochroleuca* var. *claroflava*	*olivascens* var. *citrina*

Maire	Rea	No. of bound volume	No. printed on Plate
Candolleanum forma	*catarium*	1180	1176
hydrophilum? spore trop grande	—	1181	1157
Hyph. melantinum	—	1182	1177
?	*clivensis*	1183	969
?	*gyroflexa*	1184	970
Psathyrella subatrata	—	1185	1158
?	—	1186	1160
vitellinus var.?	—	1187	1159
rufo-olivaceus, adulte, très probablement	*testaceus*	1188	1190
?	—	1189	1191
torvus Fr. non Quél.?	—	1190	1192
tophaceus Fr. Ricken!	—	1191	1193
venetus?	—	1192	1178
? ?	—	1193	1162
spadiceus	—	1194	1161
D'après les spores ce serait plutôt un *Clitocybe* du groupe *cerussata*	—	1195	1194
blennius?	—	1196	1195
? forme blanche de quelque autre espèce	—	1197	1197
flava Romell? et forme de *R. ochroleuca*	—	1198	1196

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1	1	59	76	117	5	175	147	233	176	291	283
2	2	60	80	118	45	176	149	234	207	292	184
3	3	61	81	119	119	177	155	235	223	293	293
4	4	62	96	120	126	178	275	236	231	294	294
5	36	63	103	121	137	179	277	237	232	295	295
6	6	64	106	122	138	180	281	238	235	296	296
7	7	65	110	123	160	181	97	239	252	297	297
8	8	66	113	124	174	182	145	240	256	298	298
9	10	67	114	125	175	183	178	241	262	299	299
10	13	68	120	126	177	184	191	242	287	300	300
11	15	69	11	127	180	185	221	243	289	301	301
12	16	70	12	128	183	186	225	244	291	302	303
13	17	71	53	129	192	187	233	245	49	303	305
14	24	72	59	130	196	188	236	246	130	304	306
15	35	73	62	131	218	189	240	247	215	305	309
16	58	74	63	132	47	190	241	248	247	306	331
17	46	75	66	133	115	191	246	249	248	307	335
18	39	76	67	134	132	192	249	250	259	308	342
19	43	77	100	135	151	193	251	251	266	309	314
20	48	78	111	136	157	194	254	252	267	310	316
21	19	79	128	137	161	195	279	253	270	311	317
22	20	80	129	138	165	196	280	254	272	312	319
23	21	81	139	139	179	197	71	255	273	313	320
24	23	82	141	140	181	198	73	256	274	314	321
25	25	83	154	141	185	199	79	257	276	315	324
26	26	84	159	142	186	200	136	258	284	316	332
27	28	85	42	143	189	201	182	259	288	317	333
28	22	86	52	144	197	202	190	260	290	318	334
29	31	87	65	145	199	203	201	261	92	319	337
30	41	88	72	146	202	204	206	262	104	320	340
31	50	89	74	147	209	205	198	263	122	321	341
32	56	90	86	148	224	206	226	264	131	322	343
33	51	91	88	149	193	207	244	265	133	323	344
34	14	92	93	150	194	208	245	266	200	324	349
35	18	93	94	151	203	209	258	267	205	325	310
36	33	94	98	152	204	210	264	268	208	326	325
37	27	95	101	153	210	211	285	269	213	327	326
38	29	96	102	154	211	212	292	270	214	328	327
39	30	97	117	155	212	213	40	271	260	329	339
40	32	98	118	156	216	214	75	272	261	330	352
41	34	99	121	157	219	215	78	273	263	331	353
42	37	100	125	158	220	216	89	274	265	332	354
43	38	101	134	159	222	217	99	275	278	333	355
44	44	102	135	160	237	218	109	276	286	334	356
45	54	103	140	161	238	219	124	277	9	335	357
46	55	104	142	162	242	220	167	278	87	336	359
47	57	105	148	163	243	221	187	279	108	337	361
48	77	106	150	164	250	222	227	280	146	338	365
49	82	107	152	165	84	223	228	281	153	339	322
50	83	108	156	166	90	224	229	282	188	340	367
51	85	109	158	167	95	225	234	283	195	341	329
52	91	110	162	168	107	226	269	284	217	342	338
53	60	111	163	169	112	227	271	285	230	343	370
54	61	112	164	170	116	228	282	286	239	344	371
55	64	113	166	171	123	229	105	287	253	345	372
56	68	114	170	172	127	230	168	288	255	346	373
57	69	115	171	173	143	231	169	289	257	347	374
58	70	116	172	174	144	232	173	290	268	348	375

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349	376	407	447	465	523	523	540	581	328	639	1111
350	379	408	449	466	524	524	542	582	408	640	1126
351	390	409	450	467	525	525	543	583	415	641	1118
352	394	410	451	468	530	526	544	584	541	642	1117
353	395	411	452	469	318	527	545	585	548	643	1132
354	401	412	453	470	330	528	546	586	578	644	1129
355	402	413	455	471	392	529	547	587	579	645	1130
356	404	414	457	472	411	530	549	588	593	646	1135
357	304	415	458	473	412	531	550	589	603	647	1136
358	377	416	459	474	471	532	551	590	608	648	1134
359	378	417	460	475	472	533	552	591	610	649	1145
360	381	418	461	476	474	534	557	592	612	650	1141
361	382	419	462	477	482	535	558	593	615	651	1144
362	383	420	463	478	502	536	559	594	616	652	1140
363	384	421	313	479	506	537	565	595	618	653	1151
364	385	422	315	480	513	538	566	596	622	654	1154
365	387	423	380	481	521	539	567	597	308	655	638
366	389	424	406	482	510	540	568	598	312	656	640
367	391	425	409	483	528	541	569	599	350	657	641
368	396	426	419	484	529	542	570	600	388	658	644
369	397	427	421	485	346	543	580	601	495	659	645
370	398	428	435	486	347	544	584	602	526	660	646
371	400	429	439	487	351	545	585	603	527	661	647
372	403	430	448	488	360	546	586	604	564	662	648
373	323	431	465	489	498	547	587	605	589	663	650
374	336	432	476	490	500	548	588	606	599	664	651
375	345	433	477	491	501	549	358	607	598	665	652
376	362	434	478	492	505	550	554	608	600	666	653
377	363	435	479	493	507	551	555	609	601	667	654
378	364	436	485	494	508	552	556	610	606	668	655
379	366	437	466	495	516	553	560	611	614	669	656
380	368	438	467	496	532	554	561	612	621	670	657
381	417	439	469	497	533	555	562	613	369	671	658
382	418	440	470	498	535	556	563	614	393	672	659
383	426	441	473	499	534	557	572	615	486	673	660
384	429	442	475	500	468	558	573	616	489	674	661
385	430	443	480	501	348	559	574	617	504	675	662
386	431	444	481	502	399	560	575	618	553	676	663
387	433	445	483	503	405	561	576	619	571	677	664
388	437	446	484	504	423	562	577	620	591	678	665
389	407	447	487	505	432	563	582	621	595	679	667
390	410	448	488	506	454	564	583	622	597	680	668
391	413	449	490	507	456	565	302	623	623	681	669
392	414	450	491	508	464	566	581	624	624	682	670
393	416	451	492	509	496	567	590	625	626	683	671
394	420	452	493	510	511	568	592	626	627	684	672
395	422	453	386	511	512	569	594	627	628	685	673
396	425	454	424	512	514	570	596	628	629	686	674
397	427	455	494	513	515	571	602	629	630	687	675
398	428	456	497	514	531	572	604	630	631	688	676
399	436	457	499	515	536	573	605	631	632	689	677
400	438	458	503	516	537	574	607	632	633	690	680
401	440	459	509	517	307	575	609	633	634	691	681
402	441	460	517	518	311	576	611	634	635	692	682
403	443	461	518	519	434	577	613	635	636	693	683
404	444	462	519	520	442	578	617	636	637	694	684
405	445	463	520	521	538	579	619	637	639	695	685
406	446	464	522	522	539	580	620	638	642	696	686

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697	687	755	721	813	847	871	836	929	868	987	925
698	689	756	750	814	855	872	861	930	890	988	931
699	690	757	752	815	748	873	863	931	891	989	932
700	691	758	757	816	765	874	862	932	893	990	934
701	693	759	758	817	769	875	867	933	898	991	935
702	694	760	759	818	791	876	869	934	900	992	936
703	695	761	760	819	792	877	870	935	902	993	937
704	697	762	761	820	796	878	871	936	907	994	955
705	698	763	762	821	797	879	856	937	905	995	957
706	699	764	763	822	807	880	857	938	906	996	959
707	700	765	768	823	809	881	858	939	1102	997	960
708	701	766	770	824	817	882	859	940	1104	998	961
709	702	767	739	825	820	883	860	941	1105	999	962
710	703	768	740	826	823	884	866	942	1109	1000	963
711	705	769	744	827	828	885	872	943	1108	1001	965
712	706	770	747	828	833	886	873	944	1112	1002	966
713	707	771	751	829	839	887	874	945	1120	1003	926
714	714	772	753	830	849	888	876	946	1124	1004	938
715	715	773	754	831	742	889	878	947	1119	1005	941
716	716	774	755	832	784	890	882	948	1137	1006	942
717	717	775	764	833	786	891	883	949	1138	1007	948
718	731	776	772	834	790	892	894	950	1139	1008	951
719	666	777	777	835	806	893	895	951	1148	1009	952
720	679	778	778	836	805	894	916	952	1149	1010	956
721	708	779	779	837	808	895	875	953	1156	1011	958
722	709	780	780	838	816	896	879	954	1155	1012	964
723	710	781	782	839	818	897	881	955	1113	1013	967
724	711	782	840	840	821	898	884	956	1123	1014	969
725	712	783	766	841	830	899	885	957	1127	1015	970
726	723	784	767	842	835	900	896	958	1131	1016	971
727	724	785	774	843	848	901	897	959	1153	1017	973
728	725	786	775	844	851	902	899	960	1159	1018	976
729	726	787	776	845	852	903	904	961	1162	1019	981
730	727	788	787	846	853	904	908	962	1165	1020	982
731	728	789	812	847	643	905	911	963	1166	1021	985
732	729	790	814	848	649	906	913	964	1167	1022	986
733	730	791	822	849	722	907	914	965	1172	1023	988
734	738	792	824	850	773	908	915	966	1170	1024	992
735	719	793	826	851	781	909	918	967	1176	1025	996
736	720	794	837	852	789	910	919	968	1177	1026	998
737	732	795	838	853	795	911	877	969	1183	1027	1018
738	733	796	841	854	810	912	880	970	1184	1028	1019
739	734	797	842	855	813	913	886	971	922	1029	1020
740	735	798	850	856	827	914	887	972	923	1030	1021
741	736	799	688	857	831	915	888	973	924	1031	1022
742	737	800	788	858	843	916	889	974	927	1032	1032
743	741	801	794	859	844	917	892	975	929	1033	1033
744	743	802	800	860	854	918	901	976	933	1034	1036
745	745	803	801	861	864	919	903	977	939	1035	977
746	746	804	802	862	865	920	909	978	943	1036	978
747	749	805	803	863	692	921	910	979	944	1037	984
748	771	806	804	864	756	922	912	980	945	1038	1026
749	783	807	819	865	793	923	917	981	946	1039	991
750	785	808	825	866	798	924	920	982	947	1040	993
751	696	809	829	867	799	925	921	983	949	1041	1001
752	704	810	832	868	811	926	1116	984	940	1042	1003
753	713	811	845	869	815	927	625	985	954	1043	1006
754	718	812	846	870	834	928	678	986	968	1044	1009

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1045	1010	1071	990	1097	1049	1123	1077	1149	1096	1175	1175
1046	1015	1072	994	1098	1054	1124	1078	1150	1098	1176	1180
1047	1016	1073	995	1099	950	1125	1079	1151	1122	1177	1182
1048	1030	1074	1000	1100	980	1126	1080	1152	1152	1178	1192
1049	1025	1075	1002	1101	1024	1127	1082	1153	1158	1179	1110
1050	1050	1076	1007	1102	1053	1128	1083	1154	1168	1180	1107
1051	972	1077	1008	1103	1055	1129	1084	1155	1171	1181	1115
1052	987	1078	1031	1104	1057	1130	1085	1156	1174	1182	1125
1053	999	1079	1039	1105	1059	1131	1056	1157	1181	1183	1128
1054	1004	1080	1041	1106	1058	1132	1067	1158	1185	1184	1133
1055	1012	1081	1035	1107	1060	1133	1071	1159	1187	1185	1146
1056	1013	1082	1051	1108	1061	1134	1081	1160	1186	1186	1150
1057	1014	1083	928	1109	1062	1135	1086	1161	1194	1187	1169
1058	1017	1084	930	1110	1063	1136	1087	1162	1193	1188	1178
1059	1023	1085	953	1111	1064	1137	1088	1163	1103	1189	1179
1060	1029	1086	979	1112	1066	1138	1089	1164	1106	1190	1188
1061	1040	1087	997	1113	1068	1139	1090	1165	1114	1191	1189
1062	1042	1088	1005	1114	1099	1140	1091	1166	1121	1192	1190
1063	1043	1089	1011	1115	1065	1141	1092	1167	1143	1193	1191
1064	1045	1090	1027	1116	1069	1142	1093	1168	1142	1194	1195
1065	1046	1091	1028	1117	1070	1143	1094	1169	1157	1195	1196
1066	1047	1092	1034	1118	1072	1144	1097	1170	1160	1196	1198
1067	974	1093	1037	1119	1073	1145	1100	1171	1161	1197	1197
1068	975	1094	1038	1120	1074	1146	1101	1172	1173	1198	1147
1069	983	1095	1044	1121	1075	1147	1052	1173	1164		
1070	989	1096	1048	1122	1076	1148	1095	1174	1163		

Toadstools and Mushrooms and other Larger Fungi of South Australia. By John Burton Cleland, M.D. Pp. 178 with 6 coloured plates and 35 text-figures. Adelaide, British Science Guild. 5s.

Those who study Agarics in this country doubtless appreciate the difficulties of workers in distant lands. Many species occur all over the temperate regions of the globe and several of them are readily recognised from illustrations. The additional greater precision of modern descriptions enables some determinations to be made with complete satisfaction. But there are endless difficulties. Some of the earlier collections sent to Europe were named in what would now be regarded as a rather casual manner. As a result many European species were recorded which were really doubtful and on the other hand some species already described from Europe were given new names. Thus an Australian mycologist, for example, has not only to recognise European species but has also to determine what the Australian forms are which appear in the old lists with European names.

Dr Cleland's handbook shows much evidence of these difficulties but he has based his descriptions on the Australian forms and thus it will be possible with further knowledge to determine the identity of the fungus described, no matter what name is now given to it. A large proportion of the 279 species described have been examined by the author and a considerable number are given with his name as the authority—but there are no Latin diagnoses.

The book opens with a general introduction of 28 pages which deals with points of interest—edibility, luminosity, habitats, uses and the like—which gains from having reference to Australian fungi. This is followed by a glossary. Classification is then outlined and a key is given to the genera. The arrangement of the body of the work follows Rea and indeed the generic descriptions are taken verbatim from *British Basidiomycetae* for all genera there listed: the additional genera are based in the main on Killerman (Engler & Prantl).

The handbook will prove of considerable value to mycologists interested in distribution because of the indication it gives of the species of Agarics found in South Australia. It will moreover doubtless do much to stimulate the study of the group amongst those for whom it was primarily written. It forms one of the series of Handbooks of the Flora and Fauna of South Australia whose preparation has been undertaken by the South Australian Branch of the British Science Guild, and the State Government prints the work and publishes it at cost price: the present volume costs less than four shillings in English money. It is to be hoped that such a liberal-minded governmental attitude towards biological science will meet with success in every way and encourage other legislators to act similarly.

J. R.